

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

"PRACTICAL ACCOUNTING FOR GRAIN ELEVATORS" BEGINS IN THIS ISSUE

FIVE PS.



Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

VOL. XXXIII.

CHICAGO, ILLINOIS, AUGUST 15, 1914.

No. 2.

One Dollar Per Annum.
SINGLE COPIES, TEN CENTS.

The Columbus Laboratories' Service

Will give you the correct results in the buying, grading and blending of wheats. Our complete analysis of wheat gives you its flour and milling value. Our method of estimating gluten is the only correct way of determining the actual gluten of the flour in the wheat. Our analyses of feeds are accepted as standard.

We have a complete consulting staff and can handle any problem that may arise in your business.

We make a specialty of water analyses for sanitary and for boiler purposes.

Consult us on all patent matters before applying for patent or beginning litigation. Our advice will save you money.

Our school for millers lays the foundation for a thoroughly scientific and up-to-date miller.

Write for Information.

The Columbus Laboratories, 31 N. State St., Chicago, Ill.



New York Boston
San Francisco

BE SURE
it's the
"MOHAWK"
brand of rubber belting.
Order of your building
contractor or dealer
or write us direct.

Consign your Grain and Field Seeds to

Somers, Jones & Co.

82 Board of Trade, CHICAGO

VAN LEUNEN SERVICE

TRY IT



Give Us Your Business

COURTEEN SEED CO.

MILWAUKEE, WISCONSIN

CLOVER and TIMOTHY SEEDS

SPECIAL PRICES ON GRAIN BAGS

Write Us When Interested

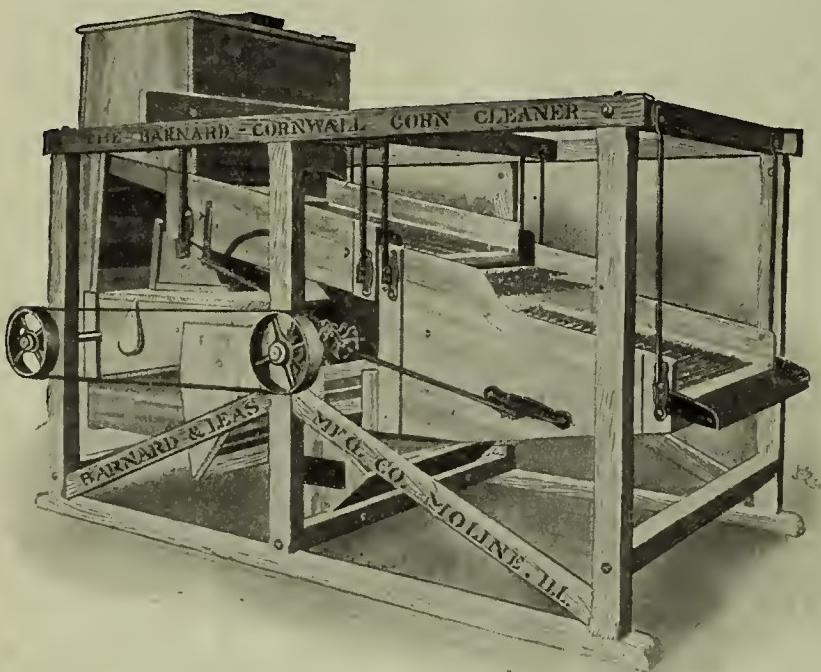
The Barnard-Cornwall Corn Cleaner

Is practically two machines in one—a corn cleaner and a receiving separator, according to the kind of sieves used.

Will clean wheat, oats and other grain as well as corn.

It has a double row of steel rods for separating the corn from the cobs and husks. Is equipped with our patent finger sieve which cannot clog. Has counterbalanced shaker, two air separations and the latest style feeder.

*The First
of the
Sieve
Corn Cleaners*



*Always
the Leader
in Capacity,
Efficiency
and Durability*



The Victor Corn Sheller

Is known wherever corn is grown as the standard sheller. It shells corn economically, efficiently and easily.

Has spiral conveyor feed and is adjustable while running.

Install these machines and be ready for the new crop.

BARNARD & LEAS MFG. CO.
MILL BUILDERS AND
MILL FURNISHERS
ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.

Reliability—Durability—Efficiency

are features that have made

THE WESTERN LINE of Shellers and Cleaners famous the world over

Sales on Western Shellers and Cleaners have increased 50% in the past five years. This is an unequalled record for the entire sheller and cleaner industry for this period. And increased sales can only result from increased demand.

Argue as you will, the grain trade buys that sheller and cleaner that it considers best value for the money. These record figures prove indisputably that Western machines are the most reliable, durable and efficient in their line and have been selected as a preferred investment by men who judge sheller and cleaner values.

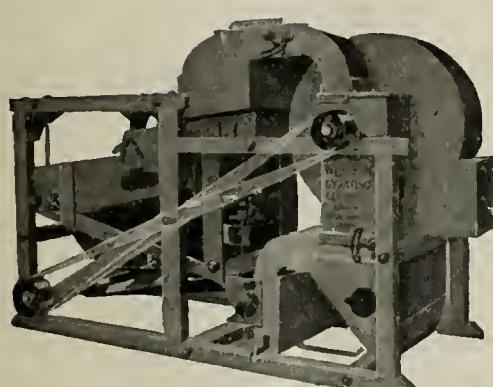
Western engineers and designers are satisfied with only the best of material used in the construction of their machines. The average manufacturer is satisfied with the normal standard of his "price class." The Western engineers and designers forget every other consideration except quality and adopt the best regardless of precedent.

As a consequence the Western shellers and cleaners are always ahead of the field to-day. As sheller and cleaner values go, we firmly believe that the Western are the most remarkable machines in America. And we are not alone in this belief, as the overwhelming demand for Western machines conclusively proves.

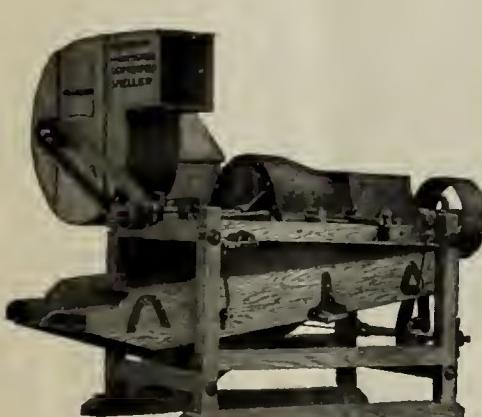
If you would be convinced, write for our complete catalogue, giving conclusive evidence of the real merits of the Western line of shellers and cleaners, our claims and guarantee, together with hundreds of comments of Western operators. A postal is all that is necessary. Write today.



"Western" Pitless Warehouse Shelter



"Western" Gyrating Cleaner



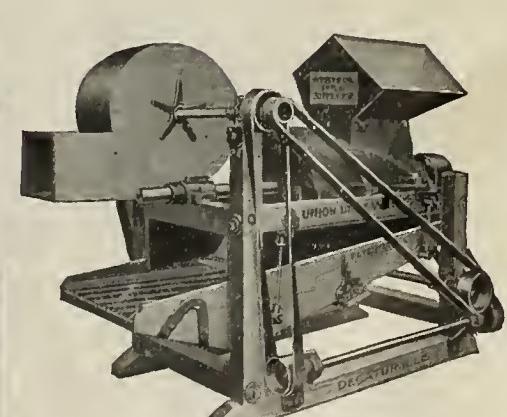
"Western" Warehouse Combined Sheller



"Western" Regular Warehouse Shelter



"Western" Rolling Corn Screen Cleaner



"Western" Mill Sheller

UNION IRON WORKS

DECATUR, ILLINOIS, U. S. A.

Beall
THE MARK OF QUALITY

**The New Rotating Warehouse
and Elevator Separator**

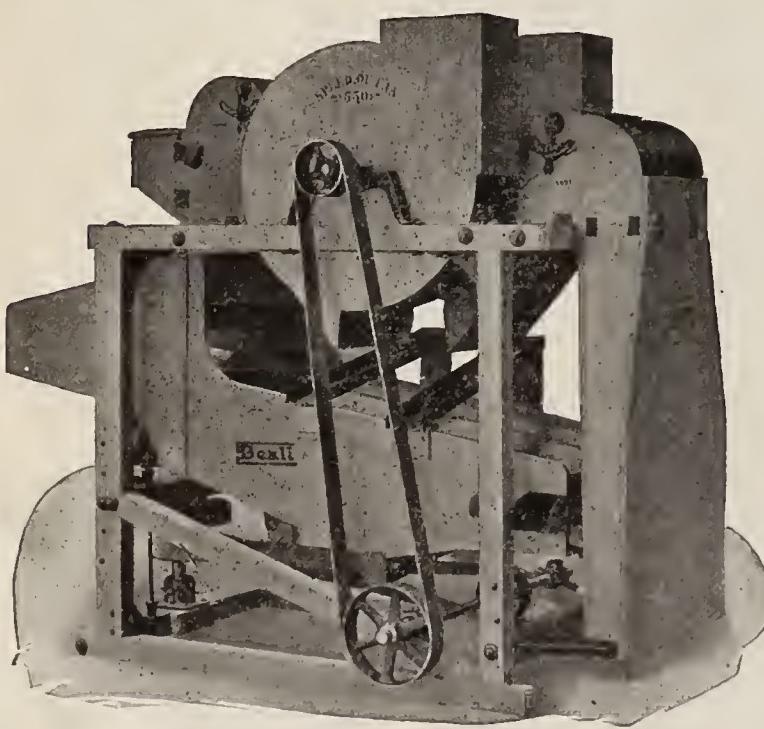
**Guaranteed
Sure Results**

Whether you buy a Beall or some other separator of lesser reputation and quality is a matter that rests entirely with you. Of other separators we can say nothing. Of the Beall we say you can expect **and will get** certain definite results that have made Beall popularity the big thing it is.

Your equipment for cleaning grain, one of the essentials in your business success, must be of a type that insures **service, reliability and economy.** The Beall guarantees these results.

The New Beall is extremely simple in design, built very strong, is thoroughly braced, and will not rattle. It embodies all the best features found in separators of other makes, and to these we have added the following pronounced features :

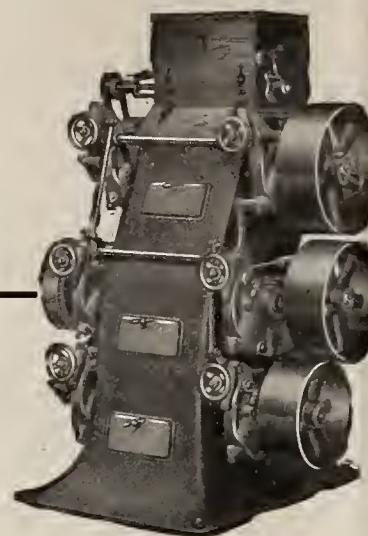
- 1st. It has a rotating motion, slow speed and perfect balance.
- 2nd. It has two fans working independent of each other.
- 3rd. It has large capacity for the amount of floor space.
- 4th. A small amount of horse-power is required for operating.



Built in Ten Sizes

A Beall Book for You.—No matter what separator you have in mind buying, post yourself thoroughly by sending for our interesting booklet on the "New Beall Separator." You will find therein ample proof of the worth of our separator and the service behind it. Your copy is now ready. Write for it today.

The Beall Improvements Co., Inc.
DECATUR, ILLINOIS, U. S. A.



You Need This Mill

**for grinding feed, table corn meal,
pearl meal, linseed meal, etc.**

N. & M. CO. THREE PAIR HIGH MILL

It has the characteristic N. & M. Co. rugged strength combined with flexibility of operation necessary to handle widely different stocks. Will grind extremely fine, medium or coarse, just as you wish.

Solid one piece cast frame—doors for examining stock beneath each pair of rolls—Ansonia rolls with our easy running, long wearing, collar oiling bearings—one lever simultaneously spreads or closes all three pairs of rolls—any pair of rolls may be removed without disturbing the others—furnished with either belt or gear drive on slow side. See book on Mills, No. 1290, for details. If you haven't got it, we will send it on request.

Everything
for the
Modern
Mill

**Nordyke
& Marmon Co.**
INDIANAPOLIS, IND.

Established 1851

Ask for
Catalogs
on any
Equipment
you need

America's Leading Mill Builders





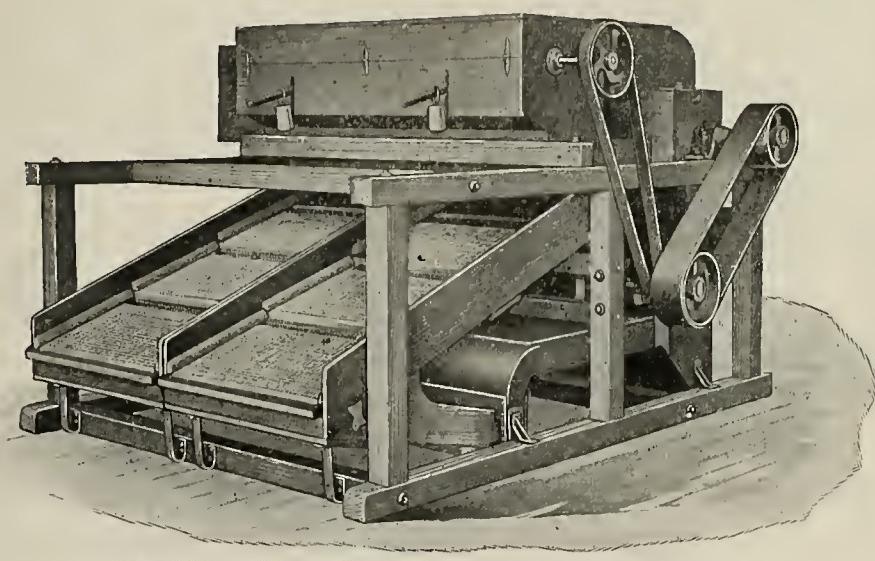
Sidney Satisfaction=Sidney Success

What is there about Sidney Grain Cleaners that makes Sidney operators so loyal, so enthusiastic? You will have to admit their feeling is different, unusual, remarkable compared with the average elevator operator's satisfaction operating other types of grain cleaning machinery. Now why? The answer is worth knowing if you are seeking utmost satisfaction and success in the grain business.

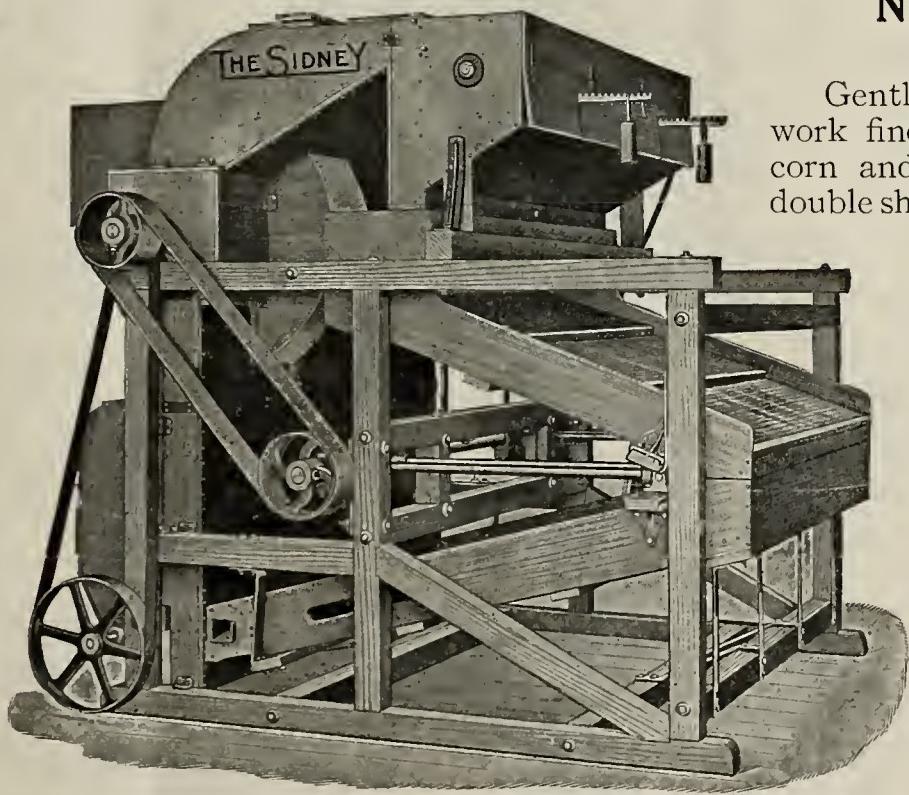
Talk with a hundred Sidney operators operating Sidney line of grain cleaners—they will always tell you:

"My Sidney Cleaner runs always. Such a thing as a cleaner failing to run or breaking down or parts wearing out never enters my mind. I can always rely upon it. It cleans grain perfectly, enabling me to secure a premium every time. From what my neighbor elevator operator tells me I know it costs me less to operate my plant equipped with Sidney line of machinery than it takes to run theirs. There is no loss of grain as it passes through the cleaner which has larger capacity than other types of the same size."

That is what Sidney owners tell you if you ask them. Ask anybody who knows grain cleaners and they will give you the same story of Sidney satisfaction. After all, that is what you buy, satisfaction. So no matter what you had in mind to spend, put it into Sidney satisfaction and you will get your money's worth.



The Sidney Twin Shoe Corn and Grain Cleaner
BUILT IN FIVE SIZES



The Sidney Double Shoe Corn and Grain Cleaner
BUILT IN FIVE SIZES

NOTE THIS COMMENT!

Jackson Center, Ohio

Gentlemen: The oats screens received and work fine for cleaning oats for seed, and as a corn and wheat cleaner, I really believe your double shoe corn grain cleaner cannot be equaled.

Cleveland Grain Co., of Cleveland, Ohio and F. Baughman of the Buckeye Grain & Milling Co., Columbus, have given my corn high honors for cleanliness. Yours truly,

K. THRELKELD.

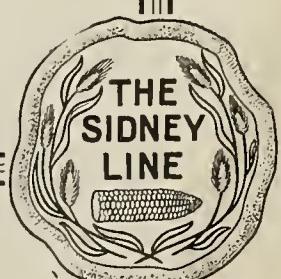
A Sidney Book for You

We have prepared an interesting booklet on grain cleaning and corn shelling machinery. Read this booklet before deciding on your new equipment. It will mean money in your pocket. Your copy has been laid aside. Write for it today.

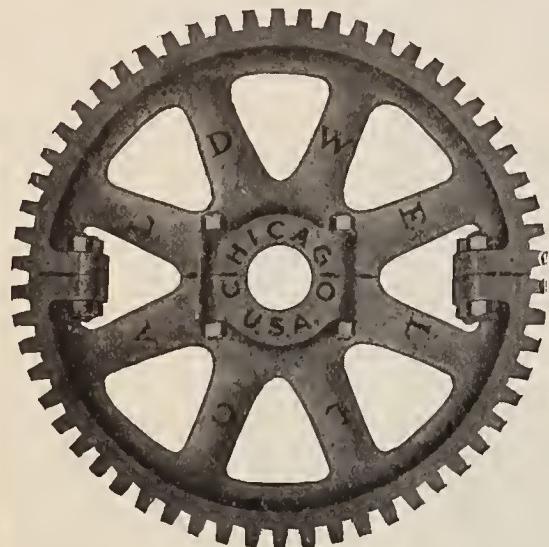
The Philip Smith Manufacturing Co.

Warehouse: Enterprise, Kansas

SIDNEY, OHIO



Machine-Molded Gears

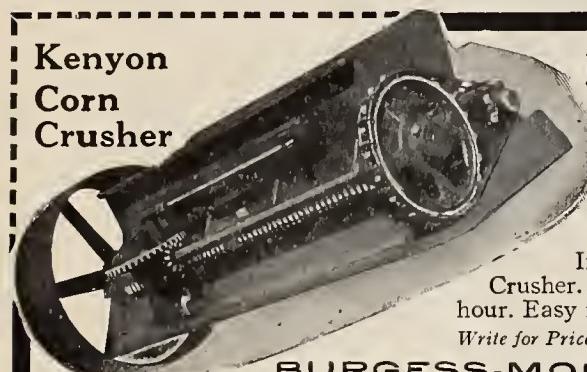


We manufacture a very complete line of Gears 1-inch pitch and larger; they are noted for their strength, durability, true rims, accurate pitch and smooth running. Hence they are highly efficient and economical. If you use gears you should have our Catalog No. 38.

H. W. CALDWELL & SON CO., Western Avenue, 17th to 18th Sts., Chicago

NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street.

Kenyon
Corn
Crusher



DAIRY MEN

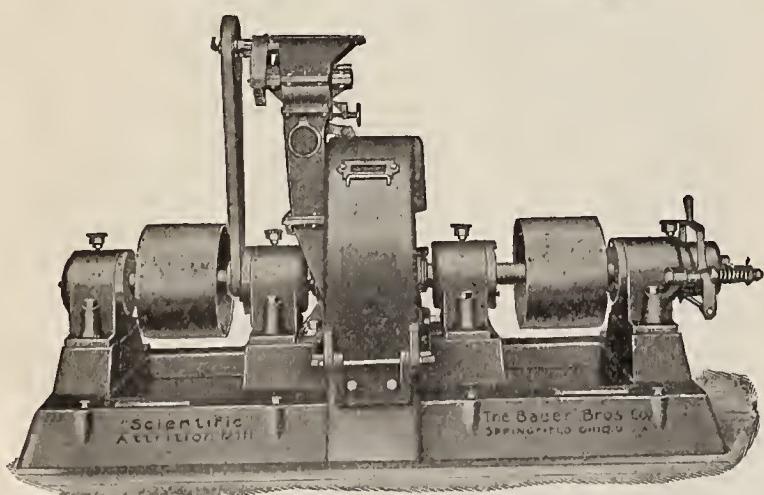
want crushed Cob Corn Meal. Profits may be gained by

YOU

If you install the Kenyon Corn Crusher. Capacity—75—150 Bu. per hour. Easy running economical of repairs. Write for Prices and Booklet—to-day.

BURGESS-MORTON MFG. CO.
GENEVA, ILL.

A PERFECT “SCIENTIFIC” BALL BEARING ATTRITION MILL



Not an ordinary mill into which have been placed ball bearings, but a machine ESPECIALLY DESIGNED on a correct principle. The ball bearings are dust proof and oil tight; no dust can work into the bearings and no oil can work out. There is no friction, therefore no hot boxes.

Send for information. We will gladly send Bulletin F on request.

Perhaps you are not planning to buy this week or this month—nor for several months to come. But if you secure this valuable data NOW, you will have the material on file for handy and immediate reference just when you do want it badly and in a hurry.

THE BAUER BROS. CO.
SPRINGFIELD, OHIO
(Formerly The Foos Mfg. Co.)

Walls, Bins and Grain Elevators

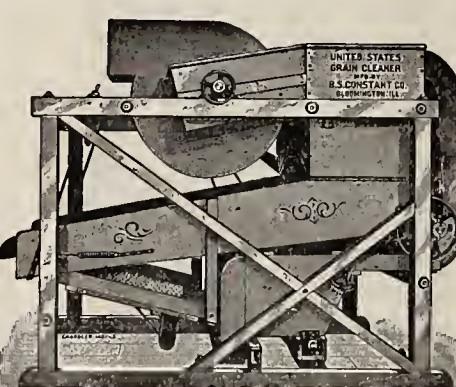
By MILO S. KETCHUM
Second Edition. 556 pp., \$4.00.

Design and construction are covered completely in this book. The new edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on “Reinforced Concrete” and “Methods of Construction and Cost of Retaining Walls” are especially valuable. It is the standard work on stresses due to granular materials.

Mitchell Bros. Publishing Co.,
431 So. Dearborn Street, Chicago, Ill.

THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.
Higher Grades—Higher Prices.
Long life machine.
Ring or Chain Oiling Bearings.
Balanced Eccentrix.
Five Separations and
All the Corn Saved.



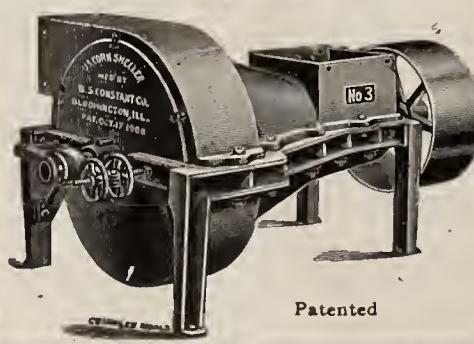
The Constant Safety Ball Bearing Man-lift

the most satisfactory connecting link between Cleaner and Sheller.

Best made.
Easiest and safest.
Adjustable Brakes
which we guarantee.

State distance between floors and get our

Net Price



Patented

U. S. Corn Sheller

Fan Discharge,
over or under, right or left hand.

Iron or Wood Frame.
No Lower Hoppering.
Cheapest Installed.
Quickest and Cheapest Repaired
of any Sheller on the market.

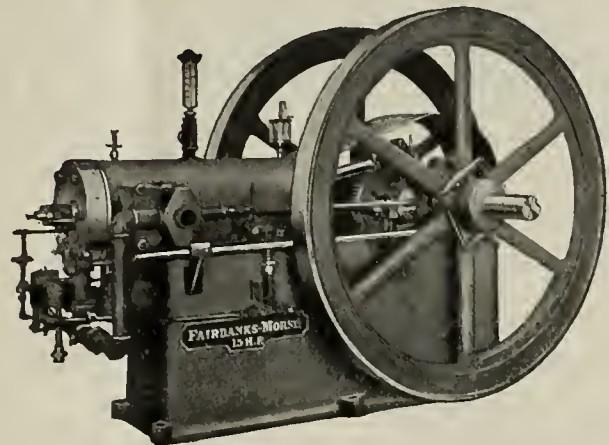
Send for a Catalog.

B. S. CONSTANT MFG. CO.
Bloomington Illinois

August 15, 1914.

75

Quick Start Oil Engines for Elevator Service



Deliver equal power, gallon for gallon, on Kerosene, Gasoline or Distillate. Reliable and smooth running on either of these fuels.

Let us give you particulars.

Fairbanks, Morse & Co.

New York
Kansas City

Chicago

Indianapolis
Omaha

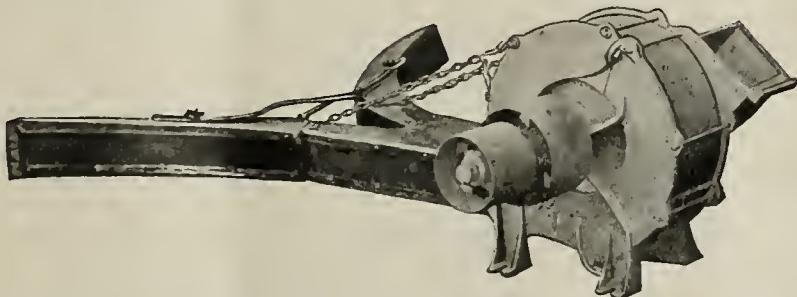
St. Louis
St. Paul

Oil and Gasoline Engines, Pumps, Water Systems, Electric Light Plants,
Electric Motors, Windmills, Feed Grinders.

544-24E

The BOSS and KING Car Loaders Pay For Themselves

VALUABLE BOOKLET FREE



WHAT THEY SAVE FOR OTHERS THEY CAN SAVE FOR YOU

Goodhue, Minn.

Dear Sir: I have used your car loader and will say that I am more than pleased with it, and would not be without same at any price and would recommend same to anyone wishing to buy one.

Yours truly,

GOODHUE ELEVATOR AND MERCANTILE ASSN

J. F. Barry, Mgr.

Hartsburg, Ill.

Gentlemen: We have used our loader continuously the past 11 years, with some minor repairs. We have it in good shape, do not see where we could get a better loader.

HARTSBURG GRAIN, COAL AND LUMBER CO.

Bloomdale, Ohio.

I have used one of your car loaders for about nine years and it certainly does the work. We can fill the cars at ends clear to roof and never need to get in the car. It is a man saver, as we never need to get in the oats dust, which is poison.

Respy. yours,

L. R. GOOD.

Boyd, Kan., Jan. 20, 1914.
Gentlemen: The car loader you sold us has given perfect satisfaction. We are well pleased with it.

Yours truly,

E. J. EVELEIGH.

Write to your nearest Elevator Supply House for interesting booklet, or to us direct.

MAROA MFG. CO. MAROA, ILL.
Dept. A

Determine the Exact Dockage of Every Load of Wheat

THE EMERSON WHEAT TESTER

eliminates all guess work in dockage and saves all the wheat.

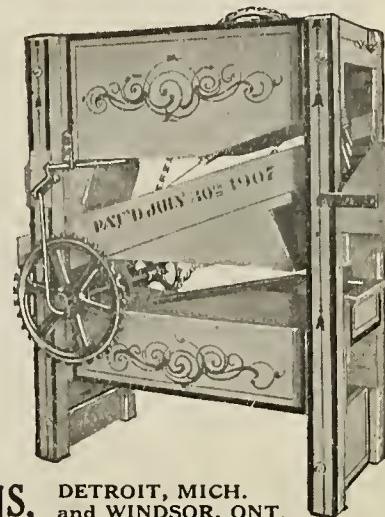
OVER 1,500 ELEVATORS NOW
USING THIS TESTER

It is the most convenient and satisfactory WHEAT TESTER made. Each machine is sold with an absolute guarantee.

The saving in wheat, time, mistakes and money soon pays for the EMERSON TESTER. Write today for further particulars.

WM. H. EMERSON & SONS,

DETROIT, MICH.
and WINDSOR, ONT.



They All Point to the Bowsher

A mill that will crush or grind ear corn (with or without shucks), Kaffir in the head and all kinds of small grain.

A mill that has conical shaped grinders—which do the work close to the center of the shaft, thus effecting a great saving of power.

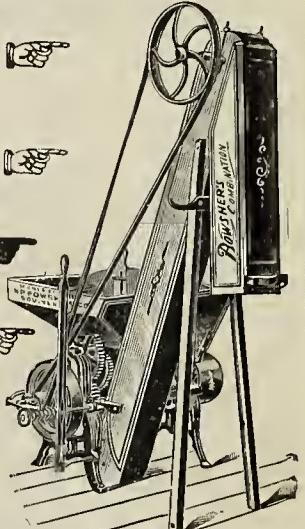
A mill that can run empty without injury, as the grinders will not strike together.

A model feed mill, light running and handy to operate; different from all others. A complete independent outfit.

These are a few of the many reasons why the Bowsher is the mill for you.

Sold with or without elevator. 10 sizes, 2 to 25 H.P.

N. P. Bowsher Co., South Bend, Indiana



THE INVINCIBLE-SYPHER Electro Automatic Magnetic Separator



Very Durable—Small Consumption of Current

Will positively remove all iron from the grain.

Has retaining force of 500 pounds, making it impossible for any iron to pass it.

This machine does not deteriorate with age—on the contrary actually becomes more efficient with use.

We are prepared to furnish a small inexpensive dynamo for it where current is not available.

INVINCIBLE GRAIN CLEANER COMPANY SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

F. J. Murphy, 234 Exchange Bldg., Kansas City, Mo.

The Strong-Scott Mfg. Co., Minneapolis, Minn.

C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.

J. J. Crofut & Co., 613 McKay Bldg., Portland, Ore.

Chas. H. Sterling, Jefferson House, Toledo, Ohio

C. Wilkinson, 25 South 61st St., Philadelphia, Pa.

F. H. Morley, 805 Webster Building, Chicago, Ill.

McKain Mfg. Co., Los Angeles, Cal.

Buckley Bros., Louisville, Ky.



**The
"Knickerbocker"
Cyclone
Dust Collector**

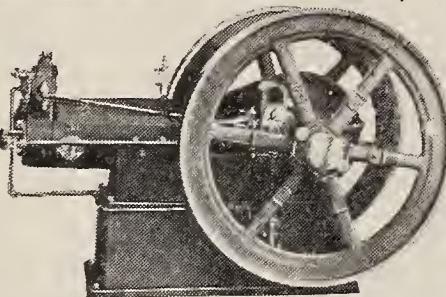
Saves Half the Power

Write for Catalog

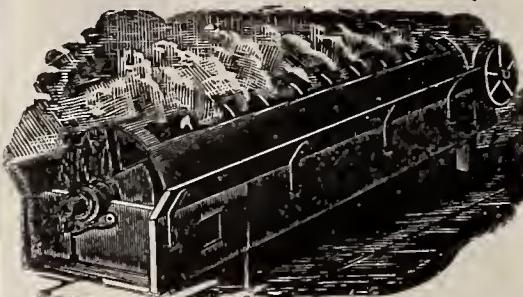
**The Knickerbocker Co.
JACKSON, MICH.**

Transit Leaks
are unknown to the grain shippers who use
KENNEDY
Car Liners
Enormous Increased Sales prove the Efficiency, Merit and Serviceability of these liners.
The Kennedy Car Liner
is the only device offered the grain shipper that makes a car Leak-Proof. Cheap—Modern—Profitable. Write now for particulars.
THE KENNEDY CAR LINER & BAG CO.
SHELBYVILLE, INDIANA, U.S.A.

THE LAUSON
KEROSENE ENGINES cut your Fuel Bills in Two. Famous for great Fuel Economy with Maximum Power Production, owing to Special Features and Design. The Sumter Built-in, Gear-Driven Magneto and no Batteries save you Money
Built in all sizes
Write for our large catalog before buying
THE JOHN LAUSON MFG. CO.
59 Monroe Street New Holstein, Wis.



SEE THAT YOUR
CONTRACT CALLS FOR



THE
CUTLER
STEAM
DRYER

SOLD BY ALL MILL FURNISHERS

**Not an Experiment. In successful use 30 years drying
CORN MEAL, HOMINY,
BREWERS' GRITS AND MEAL,
AND ALL CEREAL PRODUCTS.**

ALSO SAND, COAL DUST, GRAPHITE, CLAY, ORES, ETC.

Automatic in operation, requiring no attention.

THE CUTLER CO., North Wilbraham, Mass.
CATALOG ON REQUEST

ELWOOD'S GRAIN TABLES

Show the value of any number of bushels or pounds of
WHEAT, RYE, OATS, CORN or BARLEY
at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

\$1.25

Mitchell Brothers Publishing Co., 431 S. Dearborn St., Chicago, Ill.



**We Are Offering the
SCHMITZ SCALE TICKET PASSER**

at a largely reduced rate with
one year's subscription to the

American Elevator & Grain Trade

By the use of this handy appliance the scale ticket is passed from the elevator office to the farmer on his wagon by the scale man without leaving his office.

No time lost—the elevator operator is not subjected to sudden and frequent changes of temperature on a cold winter's day—no impatiently waiting wagoners—no doctor bills.

Morris & Stone of Mattoon, Ill., write the manufacturers Dec. 10, 1913;
Gentlemen—We cannot criticise your Ticket Passer, we only wonder why every wagon scale isn't provided with one. It is \$5.00 for a convenience of \$50.00.

The manufacturer's price of the SCHMITZ TICKET PASSER is \$5.00.

We will send it, express paid, for a limited period with one year's subscription to the AMERICAN ELEVATOR AND GRAIN TRADE for \$4.00.

Order today while the supply lasts.

NOTE—The thickness of the wall and the distance from the edge of the scale platform (nearest to scale beam) to the wall must be clearly specified in all orders.

MITCHELL BROS. PUBLISHING CO.

CHICAGO, ILL.

431 So. Dearborn St.

August 15, 1914.

77

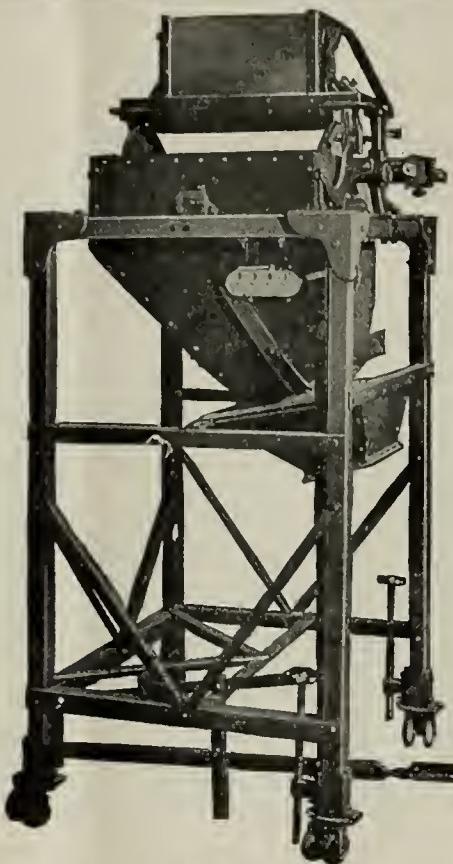
NOT A BILL OF EXPENSE BUT A SOURCE OF REVENUE

Enables
Shippers
to
Collect
Claims

Requires
No
Repairs

Occupies
Small
Space

Most
Economical
to
Install



PORTRABLE BAGGER
Write for Catalog.

No Bother
to
Operate

Never
Gets Out
of
Order

Will Not
Rust
or
Wear Out

60 Days'
Trial

Elevator Machinery and Supplies

FLOUR and FEED MILL MACHINERY
STEAM and GAS ENGINES

Pulleys, Shafting, General Power Transmission
Machinery, Roll Grinding and Corrugating

Largest Factory and Stock in Western Country

SEND FOR 450-PAGE CATALOG

GREAT WESTERN MFG. CO.

General Office and Factory
LEAVENWORTH, KAN.

Warehouse and Salesroom
1221-1223 Union Ave.
KANSAS CITY, MO.

National Automatic Scale Co.

West Pullman, Chicago, Illinois

Are Your Freight Rates Satisfactory?

Did it ever occur to you that your competitors in many instances have rates that are predicated upon a more reasonable basis due entirely to the aggressiveness of expert traffic men?

We have in our employ men who thoroughly understand these vexatious traffic problems and are prepared to assist you in every possible manner.

Results Produced or No Charge

GENERAL TRAFFIC ASSOCIATION, Inc.
715 14th Street, N. W., Washington, D. C.

Did It Ever Occur to You

That the best way to get what you want, and get it promptly, is to send your orders to people who have had experience in the business and who carry a stock of goods always ready for quick shipment? We have been in the Elevator and Mill Furnishing business over twenty-five years and feel that we know something about it. We carry in stock a complete line of supplies, including Testing Sieves, Transmission Rope, Belting, Steel Split Pulleys in sizes up to 54-inch, Elevator Buckets, Conveyor Chain Belting, Sprockets, Lace Leather, Scoops, Shafting, Collars, Bearings, etc., etc. Send us your orders. We will satisfy you.

THE
STRONG-SCOTT MANUFACTURING CO.
MINNEAPOLIS, MINN.

Northwestern Agents for The Great Western Mfg. Co., Richardson Automatic Scales, Invincible Cleaners, Knickerbocker Dust Collectors

5 in 1

Knife Protector and Ink Eraser
Pencil Holder Letter Opener
Pencil Sharpener

The Newest Novelty for Advertising

Excellent for Conventions

Send 10c for sample and full information

Alschuler—Schiller Bldg.—Chicago

Importer of Leather Goods, Pocket Knives, Pencils, Cigar Lighters, Paper Novelties, etc. Over 4,000 numbers to select from.



Agents wanted. GIBBS RESPIRATOR CO.
"B" 124 East Ave., Oak Park (Chicago), Ill.



MILLERS' MUTUAL FIRE INSURANCE ASSOCIATION OF ILLINOIS

Established 1878. Alton, Illinois

Insurance on Flour Mills and Elevator Properties.

Grain Insurance for short terms a Specialty.

CASH ASSETS - \$473,253.91

G. A. McKinney, Sec'y

Western Department: Rollie Watson, Mgr.
402 Sedgwick Bldg. Wichita, Kansas.

FUMIGATION METHODS

By W. G. JOHNSON

Contains full directions for
Fumigating Mills and Elevators.
313 Pages

Price \$1

Mitchell Brothers Publishing Co.
431 South Dearborn St., CHICAGO

**Transfer Elevators
Terminal Elevators
Country Elevators**



Concrete Fireproof Grain Elevator built for the Crabbs-Reynolds-Taylor Co. at Wingate, Ind. Capacity 60,000 Bushels.

Macdonald Engineering Co.
Monadnock Building, CHICAGO, ILL.

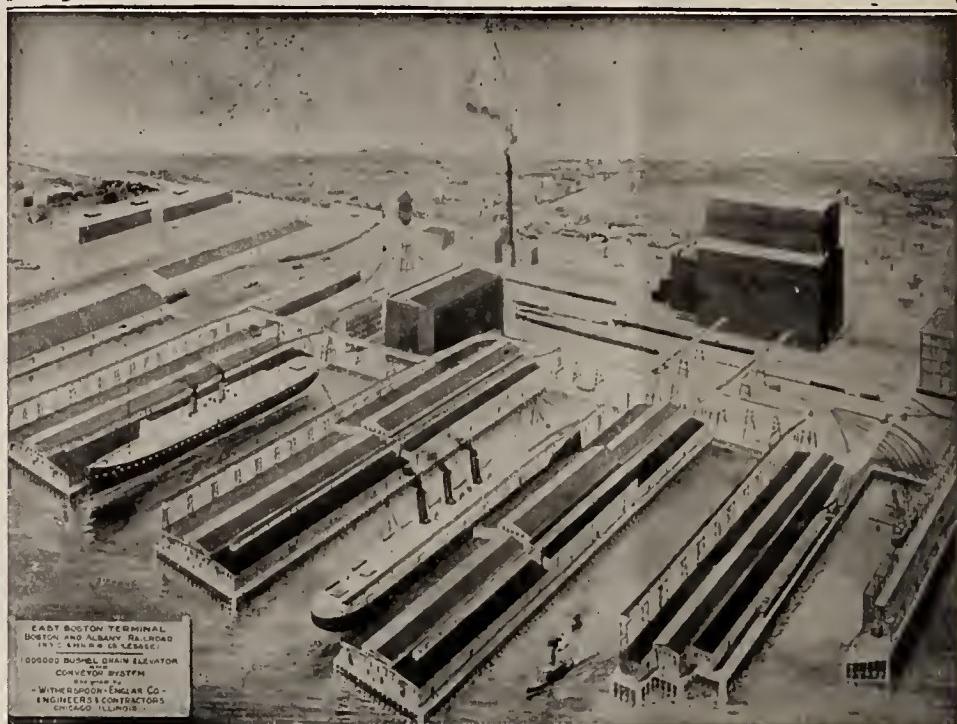
Elevator, Feed Mill and Warehouse recently completed for E.W. Conklin & Son, at Binghamton, N.Y.



Fireproof Construction Elevators, Mills and Warehouses. We prepare plans and make lump-sum price for the complete work.

MONARCH ENGINEERING CO.
Chamber of Commerce BUFFALO, N.Y.

Fireproof Grain Elevators



East Boston Terminal, Boston & Albany Railroad, New York Central & Hudson River Railroad Co., Lessees

Designs and estimates promptly furnished for all kinds of buildings for the handling and storage of grain in any locality.

Witherspoon-Englar Company
1244-1250 Monadnock Building, Chicago, Ill.



Reinforced Concrete Elevator of the Northwestern Malt & Grain Co., Chicago
Capacity 650,000 Bushels

The Stephens Engineering Company
Engineers and Contractors

Monadnock Bldg.

CHICAGO, ILL.

August 15, 1914.

79

JAMES STEWART & CO. GRAIN ELEVATOR DEPARTMENT

1507-1523 Westminster Building
W. R. SINKS, Manager

CHICAGO

R. H. FOLWELL, Engineer

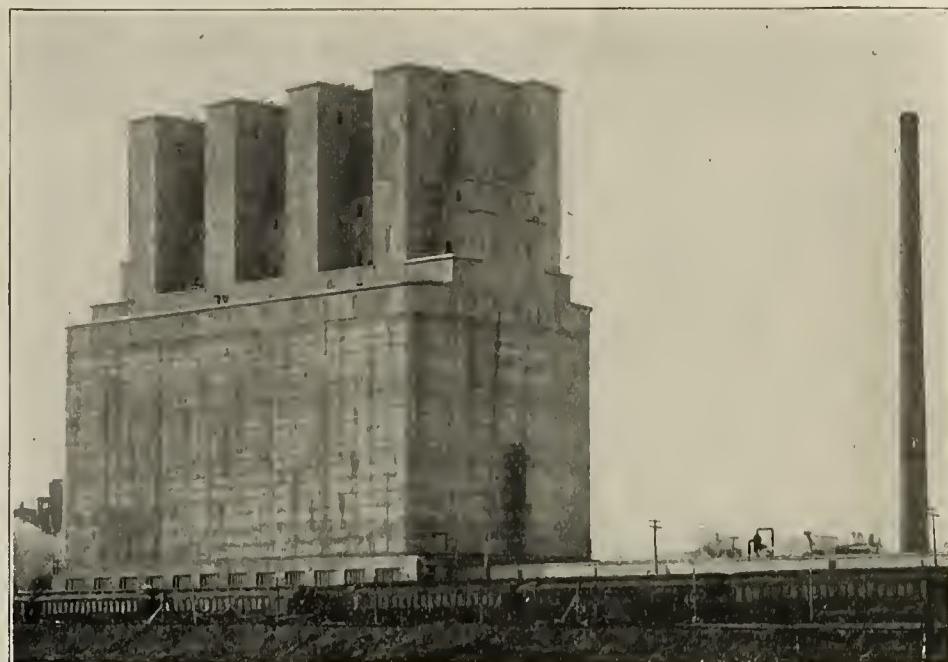


Quebec Harbor Commissioner's Elevator at Quebec, Quebec.
Capacity 1,000,000 Bushels.

We Build Grain Elevators, Any Type of Construction, in Any Part of the World
Also General Contractors with Offices in the Following Cities.

Wire, Write or Call Personally.

NEW YORK, Hudson Terminal Building	ST. LOUIS, Bank of Commerce Building
PITTSBURGH, PA., Westinghouse Building	NEW ORLEANS, LA., Hibernia Bank Building
SAN FRANCISCO, CAL., 709 Mission Street	DENVER, COLO., 1st National Bank Building
CANADIAN STEWART CO., Limited, Montreal, Can., Eastern Townships Bank Building	FORT WILLIAM, Ontario, Canada



New 1,000,000-Bushel Terminal Grain Elevator, Built for the Canadian Pacific Railway, West St. John, N. B.

FOUNDATIONS — WHARVES — POWER PLANTS — RAILWAY BUILDINGS

We are also prepared to furnish information and prices of Pneumatic Grain Handling Plants on the Seck System, which is being used so successfully in Europe.

JOHN S. METCALF CO., Limited.

Engineers and Constructors

CHICAGO

MONTREAL

Contractor, Designer and Builder of

**Grain Elevators
Mills and
Warehouses**

Wood, Concrete or Steel
Write Me Your Wants.

J. A. HORN

624 Board of Trade Bldg.
INDIANAPOLIS INDIANA

GRAIN ELEVATORS

built from our designs and by our force of workmen
are strong, substantial and economical in operation.

WOOD OR FIREPROOF

T. E. IBBERSON
ELEVATOR BUILDER

Corn Exchange Building

Minneapolis, Minn.

The paint that defies rust and decay.



Dixon's
SILICA
GRAPHITE
Paint

Specify it for economy's sake—and yours.

Made in JERSEY CITY, N. J., by the
JOSEPH DIXON CRUCIBLE COMPANY
ESTABLISHED 1827

The Barnett & Record Company

GENERAL CONTRACTORS

Designers and Builders of

Grain Elevators, Flour Mills and Heavy Structures

Reinforced Concrete and Steel Ore Dock under construction at Superior, Wisconsin, for the Allouez Bay Dock Company. Entirely Fireproof.

Write for designs and Estimates

OFFICES:

Minneapolis, Minn.

Duluth, Minn.

Fort William, Ontario



**WHEN BETTER ELEVATORS ARE
BUILT BURRELL WILL
BUILD THEM**

61 Contracts from January 1st, 1913, to January 1st, 1914.

is a fair indication of maintaining our reputation.

OUR REPRESENTATIVES AT YOUR COMMANDS.

Wire or write us at

1102-1108 Webster Building, CHICAGO.

Hubbell Building, DES MOINES, IOWA.

111 West North Street, INDIANAPOLIS, IND.

708-9 Hutton Building, SPOKANE, WASH.

FORT, WILLIAM, ONT.

BURRELL ENGINEERING & CONSTRUCTION CO.

Reliance Construction Company

**Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS**

Our long experience as a builder of elevators insures you an up-to-date house. Write today.

625 Board of Trade Building,

INDIANAPOLIS, IND.

Decatur Construction Co.

Incorporated

GRAIN ELEVATORS

Coal Handling Plants, Warehouses, Etc.

Correspondence Solicited

510-512 Wait Bldg.,

Decatur, Ill.

**THE HESS OUTDOOR
GRAIN CONDITIONER**

is attached to the outside of your mill or elevator. It will cool heating grain, sweeten musty or fermenting grain, cleanse and brighten dusty and dull grain, and improve the quality generally. It operates by concentration of the wind upon the grain while it is stirred and moved by gravity. No heat, no fans nor other machinery are required, and it takes up no space in your elevator. We furnish it in various sizes to meet any requirements.

The complete equipment costs \$75.00 and upward according to length. It will repay its cost many times in a single season, in improvement of grain passed through it.

**Hess Warming &
Ventilating Co.**

1210 Tacoma Bldg., CHICAGO

Makers of Hess Grain Driers, Moisture Testers, Corn Grading Sieves and Percentage Scales



FEED MIXERS

The best line of machines in America for producing high class goods cheaply.

Molasses and Dry Feeds Poultry Mixtures

Catalog Free

THE S. HOWES COMPANY
SILVER CREEK, N.Y.

REPRESENTATIVES

Wm. Watson, 703 West Union Bldg., Chicago
Geo. S. Boss, Jefferson Hotel, Toledo, Ohio

J. O. Smythe, 1034 W. 32nd St., Indianapolis, Ind.
F. E. Dorsey, 3850 Wabash Ave., Kansas City, Mo.

E. A. Pynch, 311 3d Ave. S., Minneapolis, Minn.
W. M. Mentz, Sinks Grove, W. Va.

Two Machines for the Price of One

THE No. 29 Double Blast "CLIPPER" CLEANER will give the same results passing the stock once through the machine that can be secured on an ordinary machine by passing the stock twice through.

It carries four full length screens mounted in two counterbalanced shoes. The stock passes over both sets of screens and through two vertical air blasts—equal to being cleaned twice.

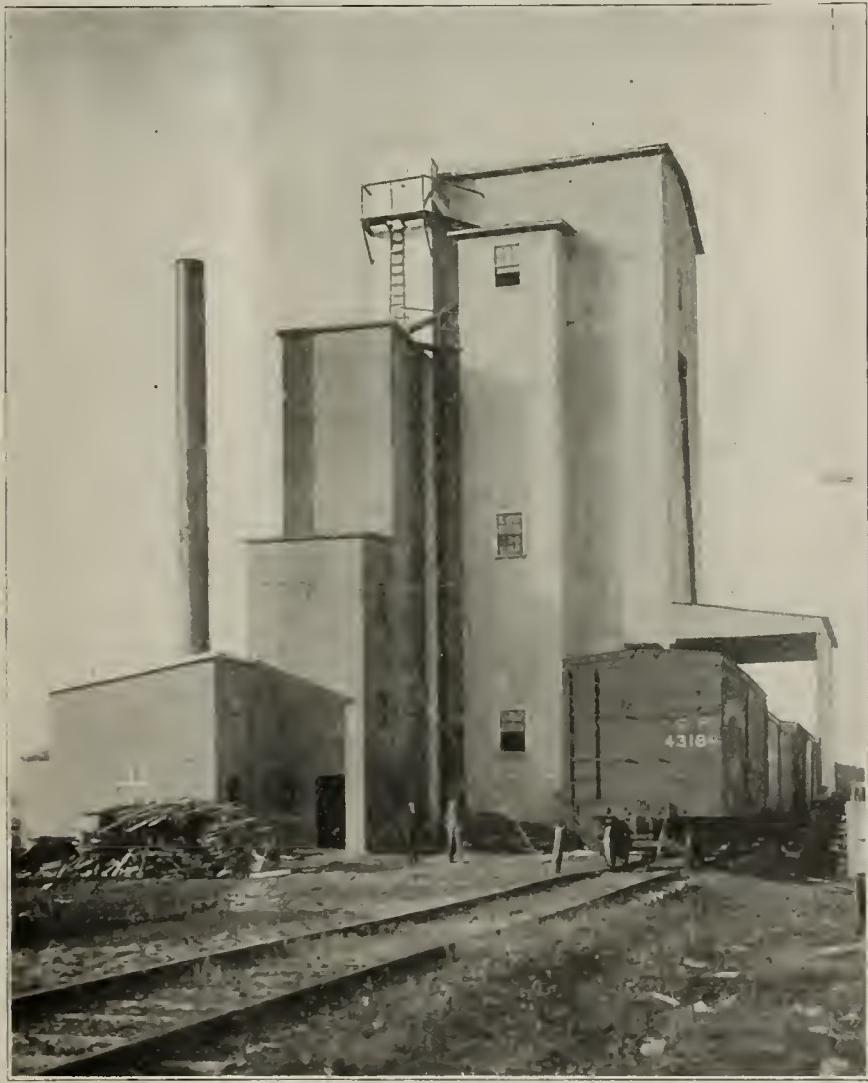
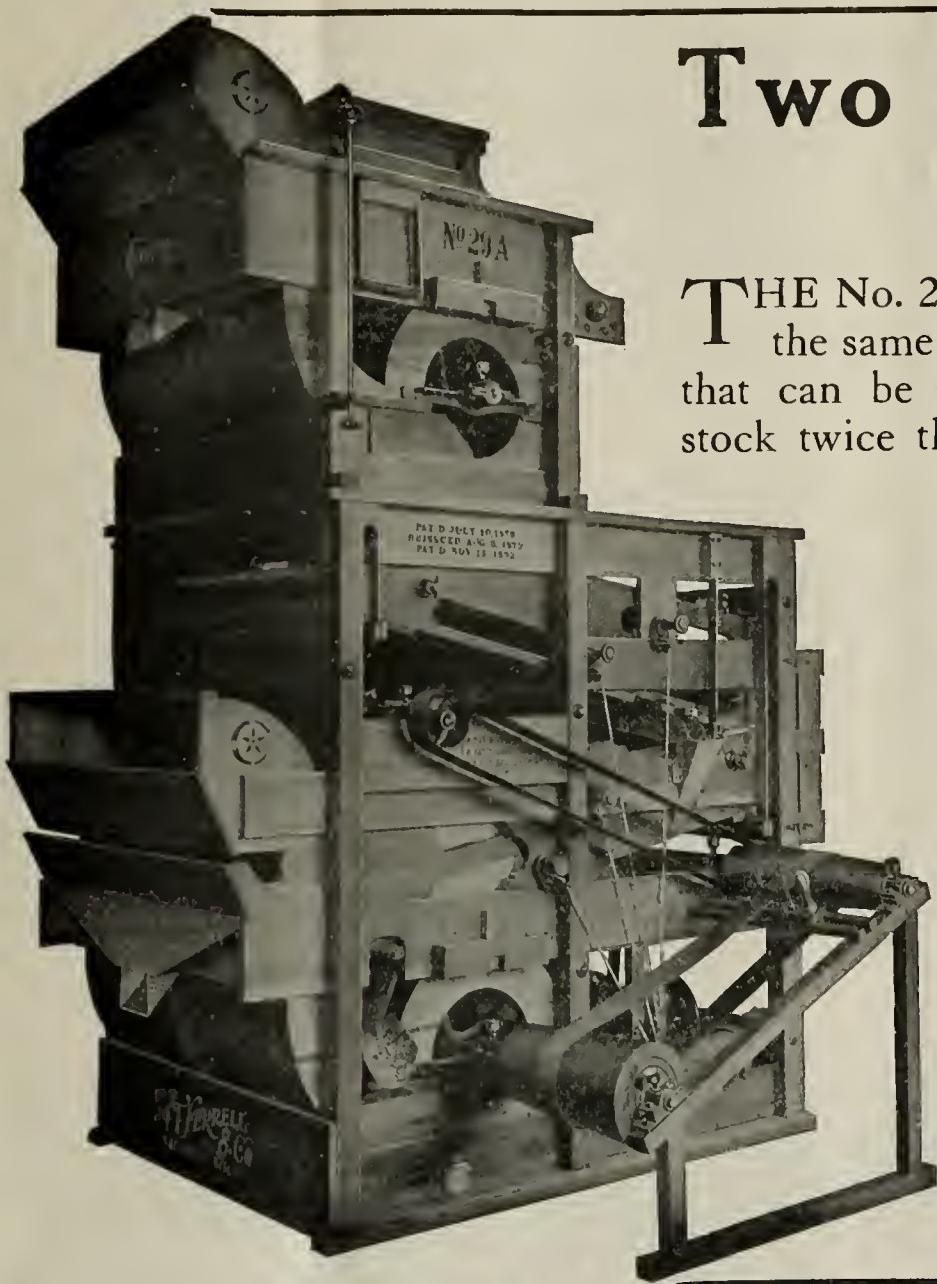
Each of the four screens is equipped with our Roller Bearing Traveling Brushes—the only perfect device ever invented for keeping the screen perforation from clogging.

The No. 29-A has no near rivals, and certainly is unequalled for the thoroughly satisfactory manner in which it handles all kinds of field and garden seeds, sweet corn, and for grading seed corn.

It is also equipped with the Special Air Controller, one of the many good mechanical features of our Cleaners. The Air Controller permits of wide variations of the air blasts and GUARANTEES ACCURATE RESULTS.

If you are looking for a machine with large capacity that will do the *best work* with the *least power*, write for our new catalogue No. 222.

A. T. FERRELL & CO., Saginaw, W. S., Mich.



Complete Drying Plant for F. A. Guy Grain Co.
Fort William, Ont.

Government Corn Grades

HEAVILY DISCOUNT grain which has been cracked, blistered or discolored by drying processes in the attempt to make contract grades. If you are about to purchase a grain drier this fact is of vital importance, and should lead you to insist on a written guarantee from the manufacturer that the drying process will not injure the product.

We guarantee the ELLIS DRIER will not crack, blister or discolor the grain but in order to make this guarantee we construct our drier frames of WOVEN WIRE CLOTH. This is an expensive material but it guarantees you a perfect product. The use of WOVEN WIRE CLOTH in the construction of grain driers is founded on the fact that wire cloth owing to its open texture, radiates the drying heat to the surrounding air and material so rapidly that the cloth at no time attains sufficient heat to injure the product which lies against it. As a further protection against discoloring and parching, the grain in an ELLIS DRIER is constantly kept moving by means of a continuous feed. GRAIN IN AN ELLIS DRIER IS NOT ALLOWED TO LIE IN ANY ONE SPOT.

If you are about to purchase a grain drier, whether for mill or elevator use, specify the following points of construction:

DOUBLE PRESSURE AIR APPLICATION
WOVEN WIRE CLOTH CONSTRUCTION CONTINUOUS FEED
RETURN AIR SYSTEM THIN GRAIN LAYERS

GRAIN
DRIERS

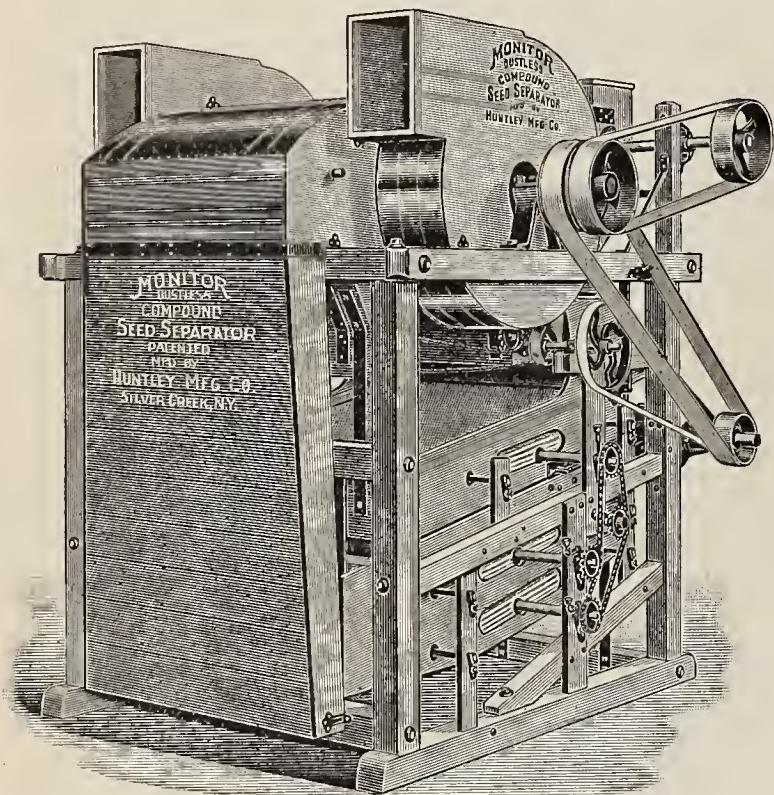
THE ELLIS DRIER CO. OAT
Postal Telegraph Bldg. CHICAGO, U. S. A. BLEACHERS

SPECIFY THE ELLIS: *It will NOT blister, crack or discolor the grain*

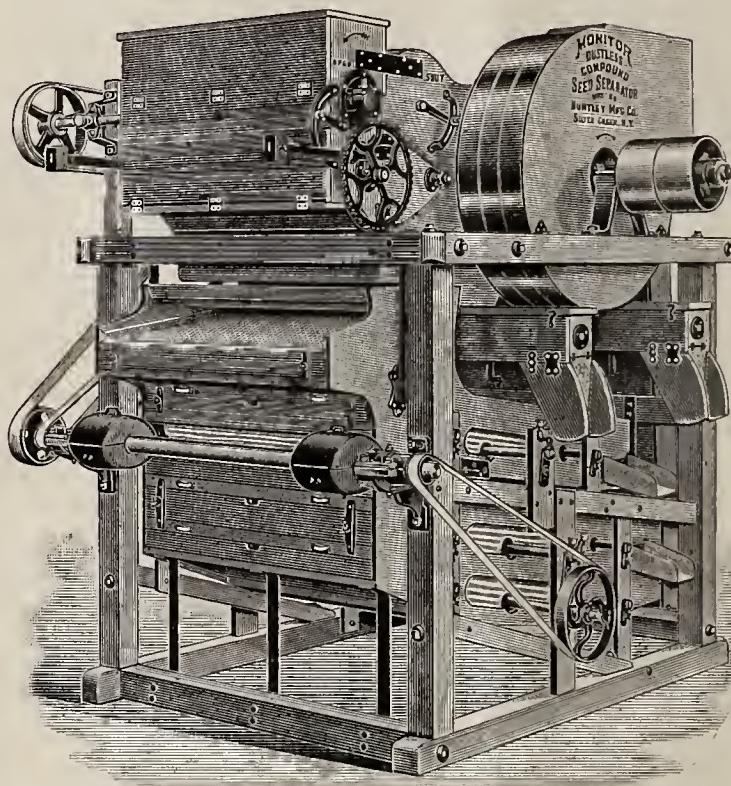
Monitor

You make the most in handling seeds
if you clean with a "Monitor"

—the reason why
95% of the largest,
best equipped seed dealers are using it.



Several
Patents



Your Choice Seeds cleaned without waste

The lightest of choice seeds, down as low in weight as twelve pounds to the bushel—this stock handled to perfection, cleaned without the sacrifice of good seeds—the work which distinguishes a "Monitor" from everything else in cleaners. Ever try to clean choice clover or alsyke? Always found some, much no doubt, of your good seed went along with the light stock, you simply had to sacrifice some good seed if you were to clean pure, you were unable to separate the dead seed from good seed without a loss, always had a shrinkage then eh—well, *you were not cleaning with a "Monitor"*.

A score of big, noteworthy features to interest you in the "Monitor," things that mean simpler, safer, better cleaning—and yet, **most of all**, there is one thing about a "Monitor" that overtops all else—it's economy; while it cleans easier and better, it also cleans without waste.

HUNTLEY MFG. CO., Silver Creek, N. Y.

Minneapolis, Minn.—A. F. Shuler, 218 Iron Exchange
Chicago, Ill.—F. M. Smith, 306 Traders Building
Portland, Ore.—C. J. Groat, 601 Concord Building
Wichita, Kansas—J. B. Ruthrauff, 301 S. Lawrence St.

AGENTS

St. Louis, Mo.—S. J. McTiernan, 25 Merchants Exchange
Jackson, Mich.—A. H. Smith, 206 Lansing Ave.
Akron, Ohio—A. S. Garman
Owego, N. Y.—J. H. Foote

A monthly journal
devoted to the elevator
and grain interests.

Official paper of the
Grain Dealers' National
Association and of the
Illinois Grain Dealers'
Association.

Established in 1882.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Published on the fifteenth
of each month by Mitchell
Bros. Publishing Co., 431 So.
Dearborn St., Chicago, Ill.

Subscription price, \$1.00
per year.
English and Foreign sub-
scriptions, \$1.75 per year.

Established in 1882.

VOL. XXXIII.

CHICAGO, ILLINOIS, AUGUST 15, 1914,

No. 2.

Seed Handling by the U.S. Department of Agriculture

How Seeds are Purchased, Tested and Distributed—Introduction of New Seeds—Elaborate Machinery for Packing—Eliminating Waste in Handling—Changes Proposed by Seed Dealers

ACH successive session of Congress in recent years has brought a recurrence of the question as to whether or not the National government shall continue the practice of distributing seeds free to farmers, grain growers, etc. To such an extent is there a division of opinion on this subject that in several instances one house of Congress has voted to discontinue the seed distribution only to have the other branch insist upon its continuance. There can be no doubt that should Congress at any time decide to call a halt on the pro-

gram of spending more than a quarter of a million dollars each year for seeds to be given away to the people, the effect would be felt in the general seed market.

Many seed dealers have very naturally taken the view that a discontinuance of the Federal seed distribution would result in a considerable increase in their business. Others have argued that the moral effect of a giving away of seed is detrimental to the business. And there are grain growers who have not, perhaps, the same direct interest in the

proposition as have the seedmen, who yet contend that the present system followed by the Department of Agriculture in the purchase and distribution of seeds is not in the best interest of the practical men engaged in the more important branches of soil cultivation.

Set over against the arguments of these critics is the evidence collected by friends and supporters of the Federal seed distribution system in proof of the tangible value of this form of governmental aid. Claims for the value of Uncle Sam's plan of



Copyright by Waldon Fawcett

HANDLING SEEDS IN THE DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

1—Interior of Seed Warehouse Showing Machines for Filling Bags with Seed; 2—Shipping Room Where Packages of Seed are Forwarded; 3—Apparatus for Stitching Packages of Seed; 4—A Closer View of the Filling Machines and Operators.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

giving away seed are based most conspicuously upon what has been accomplished in the introduction of new seeds and plants. For instance, there is the case of Kaffir corn which was introduced at a cost of no more than \$5,000 and which now produces—largely in the semi-arid Southwest—an annual crop valued at more than \$15,000,000. Durum wheat, which now gives a yield of more than \$40,000,000 largely in the Northwest, cost to introduce no more than \$30,000.

Swedish select oats cost the Department of Agriculture about \$5,000 to introduce under this system and the crop in the single state of Wisconsin is now reputed to be worth \$1,000,000 a year. Soon

putting up and dispatching millions of packets of seeds cannot but have some significance for practical men. It should, perhaps, be added, however, that these packets contain the flower and vegetable seeds which have been a big factor in the seed distribution during the past decade and a half. In an average year Uncle Sam distributes more than fifty million packets of vegetable seed and over twelve million packets of flower seed.

For the economic conduct of the seed distribution the United States is divided into five sections. Section 1 comprises the entire southern tier of states from Georgia to California. Section 2 embraces the Pacific Northwest. Most of the states through the

surplus stocks grown the previous year whereas the remaining three-fourths of the aggregate are grown under contract for the Department during the current season. Thorough tests of composite samples of the seed are made in the Federal Seed Laboratory at Washington both before and after the shipment of the bulk seed. Seeds are also tested at the experiment farm of the Department of Agriculture, located at Arlington, Virginia, just across the Potomac River from Washington—a field laboratory for seed, tests and experiments that is visited with interest by many of the grain growers and seed man who make sightseeing visits to the national capital.

Seed for distribution by the Government is shipped into Washington during the fall and winter months and is, under contract, packed, assembled and mailed to the addresses furnished by Government officials and Congressmen. It need scarcely be explained that each U. S. Senator and Representative in Congress is entitled to a certain quota of seed for the use of his constituents. The legislator, however, is not under the necessity of handling this seed. He merely makes up lists of the names and addresses to which he wishes seed shipped, noting the quantity and varieties opposite each name and these lists are turned over to the seed contractors to be filled. The contractors handle, under the direction of the Department officials, every phase of seed distribution from supplying the bags and printed packets to hauling the packed seed direct to the cars.

From the standpoint of the practical seedman perhaps the most interesting phases of the whole undertaking are found in the packeting of the seeds. This is done by machines which automatically measure the exact quantity of seed required for a packet, seal the packets and drop them into hoppers which lead to bins on the floor below. Each machine of this class will put up from 25,000 to 35,000 packets a day and at the Federal seed headquarters about twenty of these machines are in use turning out filled packets at the rate of 1,250 per minute. The assembling of the packets into packages is done by operators who sit before moving endless belts in front of the seed bins, each operator handling only one kind of seed.

The envelopes, filled with seed, pass through machines when they reach the end of the belt, which automatically seal them at the rate of 30,000 per day. Uncle Sam's seed warehouse is equipped with four of these belts and four sealing machines and the daily output of 120,000 packets is made ready for mailing at the rate of 250 per minute. This method of handling the seed mechanically and well nigh automatically is a tremendous advance over the old-time method of filling the seed packets wherein the work was done tediously by girls working with spoons.

A marked improvement that has latterly been



WAGON HAULING SEED FROM THE DEPARTMENT OF AGRICULTURE

after the Civil War the sum of \$1,000 was expended in introducing Excelsior White Schoenen oats, and this crop has increased until its value is estimated by the Department experts at something like \$15,000,000 annually. Much the same story might be told with reference to Chevalier barley which was introduced in 1871. That same year saw the introduction of Fultz wheat, which has become one of the standard varieties in the East. Aside from all the above there are often cited the instances of the Japanese short kerneled rices, the introduction of which at a total expense of less than \$20,000 has assisted materially in the growth of the rice industry in Texas and Louisiana.

Whether or not one approves of the idea of the Federal Government acting as seed donor, the fact remains that the methods followed by Uncle Sam in handling and distributing the seeds hold much of interest for all persons who are identified either directly or indirectly with the grain and seed business. The mere physical problems connected with

central section of the country from Pennsylvania to Nevada are included in Sections 3 and 4, the former covering the south central states and the latter the north central states. Section 5 takes in all the states along the northern border from Maine to Idaho. This geographical apportionment makes it possible to distribute seeds to better advantage with reference to sectional needs. For example sweet corn which is distributed extensively in Sections 3 and 4 and in a portion of Section 5 is not distribution in Section 1 because it is likely to be destroyed either by insects or fungus diseases.

Practically all seeds distributed by the Government are purchased through competitive bids obtained each spring from the principal seed growers and dealers in the country. Usually more than two hundred firms are invited to submit quotations. The bids after being publicly opened are referred to the Government's seed experts upon whose advice and recommendations the actual purchases are made. About one-fourth of all seeds purchased represent



Copyright by Waldon Fawcett

VIEW ON FIRST FLOOR OF SEED WAREHOUSE



MACHINES FOR STITCHING SEED PACKAGES

August 15, 1914.

85

made in the Governmental method of handling seed is found in the devising of means for eliminating waste in the seed handling. One of these innovations is found in the introduction of sunken trays under the seed bins, etc., which catch nearly all the waste—conserving at least 95 per cent of the seed that would otherwise be wasted in the process of handling. It is claimed that no branch of the seed distributive work has been attended with greater success than the annual scattering of packages of lawn grass seed, composed of 80 per cent Kentucky bluegrass, 15 per cent redtop and 5 per cent white clover. Indeed, large quantities of grass seeds, alfalfas, vetches, clovers, and other field and forage crop seeds have gone out during recent years.

At various times there have been proposed changes in the plan of the Governmental seed distribution with a view to affording a system that would enable Uncle Sam to do "missionary work" in behalf of agriculturists and at the same time satisfy those seed men who feel that it takes money

out of their pockets because the Government persists in giving away free seeds. One plan of compromise, the suggestion of which has been received more favorably than almost any other, is that the Government should discontinue the distribution of ordinary seeds, leaving all such business to the regular commercial houses in the trade, and should devote whatever money it has to expend upon seed work to the discovery and introduction into the United States of new seeds and plants. It is claimed that there is a valuable and beneficial work awaiting the Government in this quarter and in proof of the assertion there is cited the good that has already come from the introduction here of rare plants and seeds that have been secured by U. S. Consular officers abroad and by the special explorers who have been sent by the Department of Agriculture to out-of-the-way corners of the globe in order to secure seed adapted to American conditions—for instance, the work of the "explorers" who went to Russia and obtained rust-resistant wheat.

which pertain to the elevator, how are you going to determine what is a reasonable charge? You spoke of believing in common sense rather than in scientific management. Will common sense answer a question like that?"

"I will ask you a question," said the elevator expert, who felt reasonably sure of his ground. "I have to keep enough men and enough equipment and enough storage facilities ready to serve my customers all the time, and to take care of what might be called the peak of the load. There are some times when all of my facilities are strained to handle the business. There are others when there is very little work to be done. Obviously, it costs less to handle grain when the volume is at the maximum than when it is at the minimum. How are you going to determine, by any system, scientific or otherwise, exactly what the ~~correct~~ charge for handling grain is when your conditions are constantly varying?"

"Why not try averaging the proposition?" suggested his friend. "Since there is a wide swing from one end of the season to another, and since you seem to make money on one day, with big business, and lose it on the next, with small, the best plan would seem to be one that would take all of these things into account, and by the application of averages extending over long periods would fix a figure that would be fair under all conditions."

"Yes," retorted the veteran, "and your conditions would continue to vary and your charge would continue to be incorrect under most of the conditions with which you would meet."

"But at last," continued the other, "it would be nearer to the correct charge than those used at present, which are arbitrary, and are based on no attempt to arrive at a correct figure."

"Arbitrary perhaps they may be," was the reply, "but as long as the charge is one fixed by common consent, by competitive conditions and by the effort of each concern to keep going, it can't be so far from the truth as you imagine. If the elevator charges enough to live on, and yet not so much that its customers can make a profit by running their own plants; if it charges little enough to keep its business in competition with other plants, and yet enough to pay a reasonable dividend to the people who own its stock, it must be asking its customers to pay about the right amount, don't you think? And, after all is said and done, it's the results that count, and if you come out at the large end of the horn, nobody is going to criticise the way you got there—except, perhaps, a few people who have gone batty on the question of cost accounting, and think that an elevator man ought to have a bookkeeper sitting behind every darky laborer to ascertain how many motions are necessary to sew up the mouth of a sack of corn."

"You remind me," said his friend, laughing, as he realized that the elevator man was wedded to his idols, and could not be convinced that he should change his methods, "of the schoolboy who always had the answer in the back of the book, but couldn't always explain how he got it. You have the rule of thumb system that seems to work; but I wager you couldn't explain how you operate it to save your life."

"The answer in the back of my book," said the elevator chief, knocking the ashes out of his pipe and ending the conversation, "is success. As long as I find that, nothing else is going to worry me or the stockholders who have their money tied up in this business."

A party of 55 South African farmers are on their way to this country by way of Europe to study agricultural methods and the manner of handling crops and the marketing.

According to a recent decision by Assistant Secretary of the Treasury Malburn it will pay importers to have flaxseed cleaned. Twenty cents a bushel is assessed on imported flaxseed and a duty of 10 per cent on screenings if they have any value. If they have no commercial value they will be included in the flaxseed. In other words, plain dirt will pay flaxseed duty.

A Talk with the Elevator Man

Scientific Management Sidesteps for Experience—The Secret of Success—Slack and Full Seasons Balance—The Dividends Tell the Tale

By G. D. CRAIN, Jr

THIS scientific management thing," said the veteran elevator man, as he tamped down the tobacco in his trusty corncob, "is all right in some ways, and all wrong in others. Now, I'm a fairly good accountant, I think; so good, in fact, that I have shown the directors of this company how to convert a minus quantity into plus, and make dividends grow where there were only deficits before. And, believe me, my boy, that was some job. However, I found that it was hard work and keeping on the job most of the time, rather than introducing an efficiency engineer, that led to this result being brought about.

"I remember when I came here ten years ago. Things were all topsy-turvy. The plant hadn't been making any money, and the stockholders were feeling pretty blue. Worst of all, the equipment was in rather poor shape, and the company wasn't in a position to spend much money for new stuff. So I had to make the best of what was there. The way I solved the problems was not by studying out some beautiful theory that would reorganize the scheme of doing things; but it was by getting me a little house near the elevator, camping out with my job, and staying with it for about eighteen hours a day. I wrestled with the elevator, worked through it from one end to another, and saw every feature of its operations. I kept on the necks of my men and saw to it that they did their work without shirking, and that every car was handled just as promptly and expeditiously as possible. I traced every complaint to find out who was to blame, and then saw to it that the cause of the complaint was eliminated, believing the saying that 'Everybody makes mistakes, but the wise man makes his but once,' to be absolutely correct. I looked for chances to improve equipment, to get better men, to add new customers; and I slept as little as need be and worked as long as possible.

"I don't want to boast, but I am frank to say that when the stockholders gave me a block of stock in the concern and raised my salary, in order to make sure that I would stay with them and keep the business on a paying basis, after it had been losing money for years, I realized that I had succeeded, not because I had found out something that hadn't been understood before, but because I had used common sense, mixed with an equal proportion of hard work. I think that keeping your eyes open, using your head and staying on the job will accomplish more than anything else that has ever been suggested for keeping an elevator up to the mark."

"But don't you think," his friend suggested, "that you ought to analyze your business, so that you can know what's paying and what isn't, and can adjust

your prices accordingly? Isn't it common sense to see that every operation of the elevator pays a profit to the company?"

"That's very nice in theory," returned the elevator man, taking an extra puff or two at his pipe before he replied; "but sometimes you bump into facts which make the theories seem a little hard to apply. For example, we have here one of the biggest grain-drying plants in the country. It costs a lot to run this apparatus, and the investment is large, so that the interest and other overhead items which must be considered, according to the view of you theorists, are heavy even when the drying plant is not in operation.

"Well, then, we have been handling wheat lately, and as it has all been dry we haven't been using the drier at all. We won't have an opportunity to use it until next fall, when the new corn begins to move again. Would you advise that we increase our charges at that time, in order to make up for the period during which the drying outfit hasn't been productive?"

"It looks as though you should use your experience," retorted his friend, "and make a charge which would cover the average operations of the drying plant. What else is experience for?"

"You can't afford to discount the future," insisted the veteran. "You must hope that business is going to be normal and that you are going to get your share of it. For that reason you can't increase your charges, if they have been reasonably productive in the past, no matter what your experience in the months immediately preceding have been. In the first place, your competitors probably aren't going to increase their charges, and you must hold your own down in order to get the business."

"You believe, then," said his visitor, more or less sarcastically, "that you can insure paying dividends to your stockholders by doing some work at a loss, if necessary?"

"I believe," returned the elevator operator, "that it's better to keep a plant going at a fair profit, or a small one, than it is to shut it down. I will come nearer paying dividends by getting all the business I can at a reasonable figure, even though it may not be as large as I would like, than by losing the business to other people who are willing to do the work for less money than I."

"The point I would like to have elucidated," suggested the inquirer, "is how you are going to determine what a reasonable figure is if you don't keep a close enough account of your business to be able to analyze your costs of operation. If you can't separate the cost of running the drier from those

August 15, 1914.

The Romance of Grain

A History of Grain and the Grain Trade of the World from Remote Ages

By JOHN McGOVERN

Author of "The Fireside University," "Hospitality," "Paints and Pigments," "Trees," "An Empire of Information," Etc.

THE UNITED STATES [CONTINUED.]

HUGE CROPS.

THE United States alone, in 1912, garnered a crop unexampled in the history of agriculture—a Wheat crop of the top rank, nearly 731,000,000 bushels; a top Oats crop of 1,418,337,000 bushels; a top Barley crop of 223,824,000 bushels; a top Rye crop of 35,664,000 bushels; a Rice crop of 25,054,000 bushels, and a perfectly amazing and Bubblingnagian Corn crop of 3,124,746,000 bushels. Four leading grains increased nearly thirteen hundred million bushels over the preceding year, in which there had been no cry of scarcity nor any high price of cereals.

To see our exports as a total vastly increase, while the item of exported grain vastly diminishes, and the crops increase vastly, is indeed a spectacle to gratify the lover of his country and its welfare. Such is the present aspect, for Canada is now sending out as much wheat as the United States. But the exports of the 1912 crop were by no means inconsiderable.

States of the Federal Union that once led in the production of Wheat now do not supply their own increased population. In 1912 it was said that only one state east of the Mississippi (Delaware) actually fed entirely of its own wheat.

CHICAGO STOCKS.

No city ancient or modern has ever seen the stocks of grain that have sometimes accumulated in the Chicago visible supply. At one time there were 30,000,000 bushels of Wheat in the city, with other cereals piled comparatively high, equaling at the time the supplies of all the cities of Europe.

Free shiploads of grain have been sent from America all over the world, particularly to Ireland and Russia.

The inland maritime vessels have increased in size with the ocean-going craft, and serve as winter store houses. There was a sensation at Chicago when the first one of the vessels went into winter quarters there with nearly a million bushels of oats on board, already loaded for the opening of navigation the next spring.

XXXIV.

KING CORN

THE AMERICAN INDIANS.

At last we come logically to corn (maize), the one American cereal, and we may profitably describe the customs of a tribe, the Omahas, as set down scientifically by Captain Powell, whose patience and work for the United States covered much of a vast subject.

The Omahas called corn "mutter" (Isis).

Among the Omahas the Hanga gens (that is, foremost family) regulated the planting and harvest. From the harvest the keeper of the Hanga sacred tents selected red ears of perfect corn. The next year this keeper carried the sacred corn to each household, giving two or three grains to every planter. These were mixed with the seed corn, and planting was then legal. Some of the Inke-Sabe gens could not eat red corn (taboo). Corn was parched before it was ground or pounded.

Public property in provisions was not known. Members of the same tribe might exchange corn, etc., for any other commodity. In the communal state trade falls to its lowest condition, and there is the least gratification of individual desires.

Infinite variety may be found in these corn customs, and study may be wide and will be profitable in that direction, but a few examples, or one, as above, will suffice to show the tribal conditions of man out of which later society, like the Chaldean and Egyptian sprang.

ORIGIN AND SPREAD OF THE CEREAL.

The early Massachusetts white settlers discovered stores of corn gathered by Indians.

The Indians, at the time of the Spanish discovery and French and English colonizations, had carried corn and grown it from Mexico northeastward to the St. Lawrence and northward to Lake Winnipeg. It was not known in the far Northwest.

HAINES' GREAT BOOK.

Chapter 16 of Elijah M. Haines' book, "The American Indian," authentically covers what was known of corn, the American cereal, by the early white settlers, especially in the West. They called it *zea maize* and believed it had come northward from the hot regions. Haines follows it to Assiniboinia, notes that it was not originally known on the Columbia River, describes the cooking, including the hominy process, and gives the high opinion in which it was held even by the white hunters. The more corn a tribe (like the Iroquois) raised, the more compact could be their villages and the more powerful their movements in war. They had corn treasuries.

The Ojibway corn legend is recited in the Indian way. From that legend Longfellow made a part of "Hiawatha" (which see). Here again the spirit of corn (Isis) figures. Corn is called Mondamin. With early man everything had a *Ka* or spirit. The spirit of man became a god, but so also the spirits of animals became gods, and not the less the idea (spirit) of the tree and the food vegetables. Against this "worship of angels" St. Paul inveighs.

The Indians had the words *poh-poh* (pone), *succotash*, *samp*, *hominy* and what they called hasty pudding. White men adopted their way of cleaning corn of its outer skin or covering. They used a big wooden mortar (often in a stump) and a heavy wooden pestle.

The vast cornfields of the powerful tribes were areas of little hills, and the surface of the ground took on an appearance that early white settlers came to recognize everywhere as marking abandoned Indian cornfields.

The crops of the rich tribes were really great. The cruelties of the colonists in Western New York were as atrocious, comparatively, as any reprisal made by the "savages." General Sullivan, in 1779, reported that he had destroyed 40 Seneca villages and 160,000 bushels of corn.

ERRONEOUS IDEA OF THE "NOMADIC" LIFE.

Man, except in the individual and exceptional way, never was a wanderer; and nomad, among the nomads themselves, does not mean a people always on the move. Where there was great heat and great cold, as near mountains, or where these extremes could be avoided by a "flitting," the tribes always made the shift from summer to winter camp with the season. It was thus with the Indians. Only war and overpopulation changed this regime, as everywhere else on earth. With tribes situated in so good a country as Western New York, the land would be as well settled as need be. The crop of the Iroquois was said by white writers (whether truly or falsely) to go over a million bushels.

All the branches of the Algonquins, the Dakotas and the tropical Indians raised corn, and it grew in some places as lordly and abundantly as now. Tribes that the whites especially remembered for their corn crops were the Choctaws, Iroquois, Athapascas, Ojibways, Assiniboinas, Virginias, Appalachians and Knisteneoes.

THE STAFF OF LIFE.

Following the custom of the earliest agricultural races, the Indian called his principal grain (corn) life, or the staff of life, the mother of life, the supporter.

POETRY.

The Osage Indians held that corn was given to man by four buffalo bulls. (That is, probably, corn flourished in all four of the winds.)

THE FESTIVALS.

The Indians brought with them, from the Old World, the great festivals of early man. We have

noted some of the features of corn planting with a tribe of the Dakotas (the Omahas). The ceremonies of the Iroquois in the seventeenth century have been carefully recorded, with reasonably accurate translations of their real spirit and meaning.

The Iroquois celebrated the planting festival, a four-day green corn festival, and a four-day harvest festival. Speeches or prayers of various braves in the circle were addressed especially to the spirit of corn, but "her sisters, the beans and squashes," were also always mentioned. There is one address that we should note: "We return thanks to our grandfather He-no, that he has protected his grandchildren from witches and reptiles, and has given to us his rain." Here, by the light of the Assyrian tablets, we have Satan and The Furies and Noah. Hea-Bani, "the life-giver," was the counsellor of Izdubar (Nimrod). Noah was always the father (grandfather).

When the Indian was through he said Na-ho (whoa), "I have spoken," as Pharaoh said "Hiss!" (sign of the serpent—our S—the Egyptian "whoa") when he had finished his proclamation.

It is only by inference that the white man feels that the uncontaminated or unconverted American Indian worshiped a supreme Wah-Konda or Manitou, and dealt with no other god. Captain Powell was inclined to the idea that the initiated Indians in the high secret societies had a *shem*, or mortal name, for any spirit, as the Hebrews had Lord or Adonai for the real holy name. When the Indian said "Great Spirit," he might be addressing the corn spirit, the sun, the moon, the stars or the wind. Pope expressed the thought exactly—that the Indian "sees God in clouds and hears him in the winds"—but whether or not this god was one of an infinite number remains obscure. Probably a chief of the gods, or lord of the gods, was as far as early man ever went in religion.

There would be a mask (false face) of the corn spirit. When a brave's *totem* was corn, he might put on the corn mask, excite himself by dancing, and then, as the priest of corn, his fellow Indians certainly believed that his voice was the voice of Wahkonda or Manitou. But no white man, probably, ever had it clearly from the lips of a reverent and highly initiated Indian that this voice was more than "inspiration," or Isis, the spirit of corn herself, speaking.

In the great seven-day festival of the New Year (about Feb. 1) the two keepers of the faith, who visited the tents or houses, bore wreaths of corn-husks about their ankles, and carried corn-pounders (pestles) in their hands. The corn-pounder was used as a gavel at all solemn councils. At New Year, when the keepers pounded with the corn pestle and announced that, by the moon's aspect, they knew a new year was at hand, not even the dead could be buried for a week. It was exactly as at Luke 9:59, where Jesus uses the figure of the plaiting or ploughing festival, "No man, having put his hand to the plough, and looking back, is fit for the kingdom of God." A disciple had asked to go and bury his father.

The keeper's speech was as follows: "Drive out all evil animals (Satan). Should any of your friends be taken sick and die, we command you not to mourn for them, nor allow any of your friends to mourn. But lay the body aside and join the coming ceremonies with us. When they are over, we will mourn with you."

FOOD FOR THE SPIRIT.

All over America Father Hennepin noted that "a pottage of corn" was put in the coffin, or wrappage, with the dead Indian. As it was in the tomb of Sevek Re, in Egypt, and Mr. Wang's father in China, there must be food awaiting him, and there must be a hole, if ever so little, where the *Ka*, or spirit, could come out, and the ill will of the serpent or dragon (Satan) was no less in America than in Egypt or China to be overcome through the precautions of pious relatives surviving. The dead man had *shem*. His real name was never mentioned by his old-time fellows. "He who was our friend" was praised instead.

The fields of the ancient South Americans were narrow, but their manufactures were extensive.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

87

Corn is found in the graveyard at Ancon. The body sits, heavily wrapped in cloth of great antiquity. In vessels sometimes also wrapped with the body, is the corn. There is a likeness to later Chinese burial rites, but allied to the manner of the Northern Ugro-Finnic peoples and Etruscans.

Though the priests' (astronomical) year had 365 days, the common people dated by harvests.

The land was terraced and irrigation was sometimes accomplished by tunneling. Two granaries for corn were established in each village, one for years of famine.

The arable, terraced, irrigated land was divided into thirds—for Inca, sun, people. The individual allotment was small, according to the ideas of the early world everywhere else.

CONCLUDING THOUGHTS.

As wheat once won the religious contemplation of man, so the triumph of corn in America will

ANOTHER ARGUMENT FOR CONCRETE

The accompanying illustration is a study in contrasts, and also a graphic argument for concrete construction. It represents the ruins of the Empire Mills of Columbus, Ga., and the elevator of the plant which successfully withstood the flames and the intense heat without injury to the building or to a single bushel of grain which was stored in it. It is said that the concrete walls were red hot from the heat of the burning mill.

In all parts of the country just such contrasts have been observed in the last few years. The Burrell Engineering & Construction Company of Chicago, the builders of the Empire Elevator shown, have a number of examples no less striking. Even slow burning construction, the modern style of mill building, where concrete is not used, will be totally consumed under proper conditions, while concrete

accurate and sensitive a scale will be. Further, the fewer levers used, the more sensitive and accurate the scale.

Following out the idea of stiffness in the levers, the maximum load that may come upon the weigh bridge must be considered, not as a load uniformly distributed, but as it actually exists, a concentrated load applied to the rail through the wheels and acting at the point of contact.

Some form of relieving mechanism should be used to lift the weigh bridge free from the knife edges and allow locomotives, etc., to pass over the weigh bridge with freedom, in preference to a dead rail.

Scales should be tested each month, and oftener, to insure continued accuracy. It is remarkable how little attention is given to this very important matter.

A NEW MUSTARD SAVING MACHINE

Wild mustard seed has been the cause of much bad language. The fine screenings from the ordinary separator are full of it. It spoils a lot of good feed material. Now this mustard seed is used in certain industries and brings from \$30 to \$35 per ton. This good money is usually thrown away because elevator men and millers do not know how to separate it from the broken grains and sand that make it worthless.

The S. Howes Company of Silver Creek, N. Y., has recently put upon the market a machine which will do this work so well that it will pay for itself in a few weeks. It is called the Eureka Spiral Mustard Extractor and is entirely self-acting, requires no power and no attention after being once regulated. The separator is a vertical helical of metal construction throughout, and consists of three



RUINS OF THE EMPIRE MILLS AND THE ELEVATOR WHICH WITHSTOOD THE FIRE

doubtless redound to the honor of the Indian who taught to the Caucasian its remarkable adaptability to the needs of a people in our climate. The future statue of the Indian will hold the emblem of corn rather than tobacco. Both incense and food were early religious symbols, but man is slowly disenthraling himself from the need of incense (smoke).

The stupendous corn crops of the second decade of the twentieth century may be but the forecast of what anon shall be done toward keeping the soil at home and the nitrates out of the all-swallowing sea. Corn itself may be the main answer to Victor Hugo's lament of the Roman cloaca and the other sewers, open or closed, that brought on the sands of Assyria and Gobi. Man and the animals upon whom he is a parasite can best share and fatten on the greatest of American cereals. There is least waste, least transportation, the most of profit and permanence.

Let statesmen, studying the lessons of the Nile, the Euphrates, and the Sorrow of China, strive to avoid those arrangements and customs which finally garner the crops of the earth to be taken away from the scenes of their growth. Remember that the festival of the arrival of the wheat caravan at Rome must always be the obverse of that scene, atrocious to our sense of justice, where the laborer in Egypt was robbed of Nature's generous reward. Better no rejoicing in Rome than lamentation in industrious Egypt. Perhaps King Corn may reign on our continent in defiance of the *Orbis Terrarum*.

[THE END.]

THE CONSTRUCTION AND CARE OF TRACK SCALES

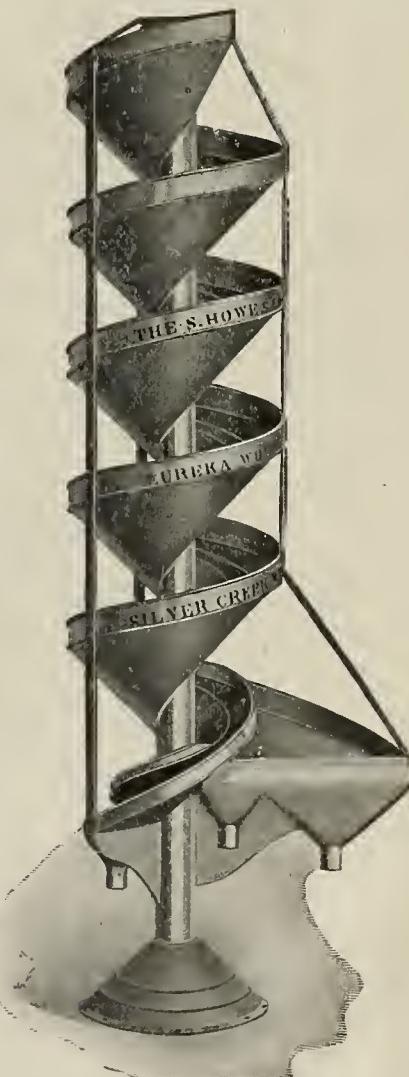
The proper construction of railroad track scales, and their care during service was the subject of a recent contribution to the American Society of Mechanical Engineers, by W. W. Boyd. A summary of Mr. Boyd's paper calls attention to important features.

The present use of cast iron or steel levers requires too much metal to obtain the necessary strength which is required in this rough service; structural shapes are suggested, because of elimination of costly patterns, lightness, ease of fabrication, etc.

All knife edge seats should be machined to insure accuracy, also knife edges are to be ground to true, straight edges.

Weigh bridges are to be made sectional, to avoid objectionable bending over the supports, such as occurs in the use of continuous beams. In order to protect the knife edges, the load should be applied as near the middle of the end span as is possible.

To insure accuracy under all conditions of loading the levers must be made stiff enough to resist undue deflection. Deflection in the levers destroys the accuracy of the scale; the less spring, the more



THE EUREKA SPIRAL MUSTARD EXTRACTOR

inclined spiral chutes of different diameters, placed one above the other. The principle on which it works is a rolling gravity.

Here's the *modus operandi*:—The screenings are fed into the top of the machine and immediately drop from the hopper onto a central chute. After passing downward a short distance, the mustard being round attains a velocity which causes it to roll from the central chute to the middle one, and a little farther down it jumps from the middle spiral to the outer chute, at the bottom of which a hop-

pered outlet is provided for it. Now, the other kinds of seeds (heavier and more or less round) roll out at the bottom of the middle chute. All remaining screenings, because of their light weight and irregular shape, travel in a comparatively slow-moving

stream, hugging the central chute all the way down and finally emerging at the bottom through a spout. From the above description it will be noted that three distinct separations are made; namely, pure mustard, heavy round seeds, and light screenings.

takes between weighing the loaded and empty wagon, which may be true of many men and may be true of most men in a slack period. On a busy day, however, when there are so many things to remember, and when so much occurs to divert attention, the fewer things that are left to the memory the more accurate and positive will be the result. Many an argument will be saved when the farmer sees that the elevator man checked that he was "On" his load because he saw him there.

Practical Accounting for Grain Elevators

A Simple System by Which Elevator Transactions Can Be Recorded—Accurate and Easy to Handle, and Acceptable to Railroad and Warehouse and Public Utilities Commissions.

By A. C. BRUDE

BUSINESS in general has suffered so much from hit-and-miss judgment in fixing a selling price at a supposed profit over the price bought at, that there is evident a general awakening to the fact that some system of accounting is necessary in any business by which the proprietor may guide his ship safely past the rocks and shoals of bad buying, competition and price-slashing, into the harbor sought by the business man, which is the credit side of the Profit and Loss account. It is a well known truth that an article costs more before it is finally disposed of than the original purchase price. There are fixed and incidental expenses and losses, all of which add to the cost. An attempt is generally made in a crude way to add expense items to the cost to determine the selling price, but without a system that shows up all expenses some elements are liable to be overlooked, which works not only loss to the owner but also injury to business for his competitor. Any business needs good accounting and the grain business certainly does, per-

with a load of grain which he wishes to dispose of. Form A is the first one used by the elevator man. It is a bound book, retained by the elevator man, and contains his record of original entry. There are two forms to a page, front and back, thus al-

The gross weight is entered in the space provided and, after the grain is unloaded, the wagon weight is ascertained and set down under the other and the result of the subtraction is, of course, the tare weight. Ample space is provided to divide the tare weight in pounds by the pounds per bushel of the grain weighed, to arrive at the contents in bushels.

The form described above is designed for use in elevators where wagon scales are used. Where the hopper scales are used and the grain is unloaded

No.				BLANK ELEVATOR COMPANY.	No.
Received.....	191..				191..
of					
	Bushels	Lbs.		Received in store of	
Gross Weight.			Grade	.....	..... Bushels No.
Dockage.....				.....	.....
Net Weight....				.....	.....
Date purchased.....	.....	.....	..... Bu.	..... lbs. Gross	BLANK ELEVATOR COMPANY.
Price.....	Am't paid.....		..... Bu.	..... lbs. Pkg.	By
Storage deducted.....			..... Bu.	..... lbs. Net	Subject to conditions on back.

FORM "B"—STORAGE TICKET [FACE]

lowing four entries to a sheet. This form has at the top spaces for the date and the seller's name, the kind of grain with its grade and dockage. There is also a space to check whether driver is on or off his wagon at the time of weighing. It is important that the heading be filled in at time of

and weighed in drafts, the form can still be used, the weights of the drafts being put down and footed, then reduced to bushels.

In the last space is entered the number of the storage ticket, which is thoroughly taken up and described in the next paragraph of this article.

The agreement.....			
.....			
.....			
Date Bought.....191..	Price.....	Amount	
Hour Bought.....	Deducted Account Storage		
Net Amount to Pay			
Received Payment in Full.			
.....			
Owner			

FORM "B"—STORAGE TICKET [BACK]

weighing and before the grain is unloaded to avoid dispute.

It is customary with many to issue a storage ticket for each load, but sometimes a seller may request that one ticket be issued for several loads. In no case, however, should a ticket be issued for grain unloaded on different days, to avoid confusion in figuring storage when the grain covered by the ticket is bought back. Neither should a ticket be issued for more than one kind of grain.

FORM "E": CONFIRMATION OF TRADE

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

is sent consignee, perhaps a commission broker, in addition to the regular bill of lading, because the information contained allows him to act more intelligently in handling the shipment, and in prosecuting claims against the railroad in case of loss or damage. The form explains itself.

Form D is a simple invoice form, in duplicate, for use when grain is sold. The original is sent purchaser and the duplicate retained as the elevator's record. It should be kept in a file marked "Unpaid Invoices" until paid, when it should be so stamped with the date and filed away alphabetically.

Form E is a confirmation of trade, filled out in duplicate, also the original sent purchaser at the time a sale is agreed upon and the copy filed away alphabetically. It is important that this be accurately filled out and promptly sent forward when the conditions of sale are fresh in mind, to avoid misunderstanding later.

[TO BE CONTINUED.]

A NEW TEXAS ELEVATOR

The Burrus Mill & Elevator Company of Ft. Worth, Texas, has been established very many years and has built up an excellent demand for its line of products. Its plant now consists of mill, warehouse, working elevator and the new storage tanks completed June 1 of the present year, appearing in the accompanying illustration.

These tanks were built by the Macdonald Engineering Company of Chicago and are six in number, affording a combined capacity of 150,000 bushels. The tanks are of reinforced concrete, 21 feet in diameter and 84 feet deep, allowing the formation of two interspace bins and two end pocket bins.

Grain is brought from the working house by a

24-inch belt conveyor running over the top of the bins in a galvanized iron cupola. It is conveyed back to the working house for cleaning and milling through a reinforced concrete tunnel beneath the tanks through which runs a belt conveyor of same capacity as one above. All the bins are provided with a 16x16-inch manhole.

The new tanks not only add to the utility of the plant, but give an attractive appearance to the buildings. The Macdonald Engineering Company states that for size they are among the best that they ever built.

JUMPING INTO BIG SHOES

To succeed a man with the international reputation which F. D. Coburn enjoyed for so many years, as the secretary of agriculture for Kansas, is a step which would daunt the courage of most men. J. C. Mohler has assumed the position quietly, modestly, but there is nothing doing in the daunting line. He is fully aware of the high reputation he must sustain, but he has the education and the training to do it; he knows the great responsibility he has taken, but he has the high courage to bear it alone and without faltering. He is comparatively young in years and the future holds nothing but promise, for to the wisdom gained in long years of association with Mr. Coburn, he adds the enthusiasm of the new generation, and the courage of a real Kansan.

Mr. Mohler was born on a farm in Osborne County, Kansas, April 7, 1875. His father was one of the early settlers of the pioneer country and even in his day was a progressive farmer, one of the first to grow alfalfa and to adopt dairying as an economical and profitable adjunct of the grain farm. Under this kind of influence the new secre-

tary was reared. He attended the district school on a corner of his father's farm and when he had learned there all that could be taught him, he studied in the Topeka schools and afterward at Washburn College.

Mr. Mohler's father for six years held the position his son now occupies, and just twenty years later on the same day and hour, the son took his father's place. About a year and a half before Mr. Coburn took the secretaryship, Mr. Mohler became a clerk in the office, and for 22 years he has been connected with the Agricultural Department of the state. He has taken the time to travel extensively during these years and from personal observation



J. C. MOHLER
Secretary of Agriculture for Kansas.

is familiar with agricultural conditions in many parts of the world.

When it came time to choose a successor for the new secretary, Mr. Mohler was selected by acclamation. His fitness was recognized and his friends freely predict that he will add luster to the already famous position in the affairs of the Sunflower State.

A REPORT OF INTEREST.

The Board of Commissioners of the Port of New Orleans has just issued its annual report in the form of a booklet, beautifully illustrated with views of the port and docks, maps, and decorative borders. There are many pictures of old New Orleans, but those of the new industrial and commercial city are of greater interest. The tables of imports and exports show a steady and very material progress, while the balance sheet of the port accounts is an encouraging document for the bondholders.

Perhaps the pages of greatest interest and importance, to the Crescent City at least, are those devoted to the new steamship routes by way of Panama. The new commercial world, western America and the Orient, is shown to be 3,153 miles nearer to New Orleans than it is to Liverpool, and 579 miles nearer than New York. The entire Mississippi Valley can feed through the southern port with this advantage. Altogether the report is interesting as well as artistic, useful as well as beautiful.

The St. Louis, Iron Mountain & Southern Railroad has inaugurated a new service between St. Louis and New Orleans. As this territory is rich in its grain yield it is expected that the New Orleans market will derive great benefit.



STORAGE TANKS OF THE BURRUS MILL & ELEVATOR COMPANY, FT. WORTH, TEXAS
Erected by the Macdonald Engineering Company, Chicago, Ill.

August 15, 1914.

Changing the Commercial Map

Decision of the United States Supreme Court in Long and Short Haul Cases Will Affect Every Shipper in the Country

By SYDNEY A. HALE

A NEW commercial map of the United States—

This is the promise held out by the decision of the United States Supreme Court, handed down on the closing day of the present term, in which the validity of the long and short haul clause of the Act to Regulate Commerce, as amended June 18, 1910, was sustained and the orders of the Interstate Commerce Commission, directing a general readjustment of rates from the entire territory east of the Missouri River to the country lying between the Rockies and the Cascade and Sierra Nevada Ranges, were upheld.

The provisions of the law declared constitutional by the highest court in the land, the fourth section of the Act to Regulate Commerce, make it "unlawful for any common carrier subject to the provisions of this Act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of a like kind of property, for a shorter than for a longer distance over the same line or route in the same direction, the shorter being included within the longer distance." * * * provided, however, that upon application to the Interstate Commerce Commission such common carrier may in special cases, after investigation, be authorized to charge less for the longer than for the shorter distances * * * and the Commission may from time to time prescribe the extent to which such designated common carrier may be relieved from the operation of this section."

CONTEST STARTED TWENTY-FIVE YEARS AGO

The opinion of the Supreme Court represents a victory won by the shippers of the intermountain country after a struggle of a quarter of a century, a victory made possible only by the action of Congress in 1910 in eliminating the qualification of 1887, that departure from the general rule laid down would be unlawful only when the transportation rendered was "under substantially similar circumstances and conditions." When first called upon to construe this section, the Interstate Commerce Commission declared that the carriers must determine for themselves, in the first instance, whether this saving dissimilarity in circumstances and conditions existed. For their guidance, the Commission announced that water competition or competition with rail lines not subject to the jurisdiction of the Commission would create the necessary dissimilarity, but that, as a general rule, competition between carriers subject to the Act and market competition would not justify a lesser charge for the longer haul. Some carriers squared their rates with this decision, others contended that any competition removed the rates at issue from the operation of the fourth section. This led the Commission, in 1892, to reverse its former action and to declare that the Commission should be the primary judge of the existence of dissimilarity, and that only competition with water carriers and lines not subject to the Act would be considered. Five years later the Supreme Court ruled that the carriers should be the judges in the first instance and that all forms of competition must be considered. This opinion the same court reaffirmed in 1901, and from that time until 1910, that section of the law was a dead letter because, in the language of the Commission, "it is always possible to show in the interlacing network of railways in this country, and in view of the intricate commercial conditions, that circumstances are different at one point from another."

THEORY OF LONG AND SHORT HAUL CLAUSE

The query naturally arises, why charge less for the longer haul? Normally such a practice is without reason. It is only when the imperious law of competition comes into sway that such an adjustment is permissible and, from a railroad transpor-

tation standpoint, even beneficial. The most common manifestations of this competition are those that arise out of struggles between rival communities, between long and short routes and between rail and water carriers. The form whose potency receives the widest general acknowledgment is water competition. Every navigable stream is a menace to the rail carriers. Between ports, rail lines are compelled to make rates which will swing the traffic movement from water to land, rates which pay something above the out-of-pocket cost of transportation, but which do not bear their full burden of the general and fixed operating charges.

The underlying principle with respect to circuitous routes is the same. One railroad has a direct line between two important traffic centers, another serves the same points via a roundabout route. To haul traffic between these two termini the longer line must meet the short line rates, and yet those charges may not be such that the circuitous system would care to carry them as a maximum for rates between points on its line intermediate to the termini. The same justification is advanced for meeting short line rates as for meeting water competition. While the charges thus assessed are below the normal rate level, the contention of the carriers is that they pay something above the mere cost of physical carriage and handling and thereby reduce the amount that the intermediate points would otherwise have to pay.

In effect, the claim of the railroads resolves itself into this: We have certain expenses that must be borne by all the traffic; we have others that are directly chargeable to specific transportation service. Every cent that we receive from competitive traffic above the actual cost of carrying that tonnage can be applied to the liquidation of our general expenses and thereby lessens the burden that would otherwise have to fall entirely upon non-competitive business. Raise our rates at competitive points and we lose that business with its margin above transportation costs; cut our non-competitive charges to a competitive basis and we will be denied fair return on the value of our property.

The problem of market competition is more complex. The question here is not one of rail disadvantages arising out of roundabout routes or the existence of navigable streams. The element of what a railroad finds it good policy to do rather than what uncontrolled competition forces it to do enters more largely. It is born of the pressure of large manufacturing and jobbing centers for the opportunity of competing in common markets upon a basis of equality with their rivals. It has life only as a railroad will make a rate out of a given locality to obtain traffic that would otherwise enter the common market from another producing area. No better illustration of its growth and influence can be found than that in the very adjustment with which the orders of the Commission and the decision of the Supreme Court deal.

THE TRANSCONTINENTAL RATE SITUATION

By the time the first transcontinental rail route was an actuality, the rush of the Forty-niners had passed into history; the Pacific Coast was already a commercial force to be reckoned with. The first efforts of the steam roads was to wrest the traffic from their ocean competitors. And they succeeded well! Lines were either controlled or driven from the seas. Until within a few months ago, but one independent steamship company remained in operation and that line lived on railroad sufferance. The rate structure that was evolved at that time was one eminently fitted to accomplish the railroads' purpose of neutralizing the ocean. Taking New York and San Francisco as representative ports of the two oceans, rates between those points were placed at such figures as would draw the

cream of the traffic to the rail lines. To interior points west of the Rockies rates were made up of a combination of the New York-San Francisco rate and the local rate from San Francisco to the interior. In traffic phraseology, this was making rates on a back-haul principle. In the same manner, commodity rates from east of the Missouri River to San Francisco graded up as the point of origin receded from the Atlantic seaboard. Class rates, however, upon which little competitive business moved, graded from New York. The position of the railroads was this: For the interior to take advantage of ocean competition, it would have to have its goods shipped by water between New York and San Francisco and then trans-shipped by rail to or from the interior; we make our rates on this basis and thereby allow the benefit of our competitive terminal rate to be reflected back to the interior. On the face of it, from a purely transportation standpoint, such an adjustment was far from indefensible, was even laudable.

But in time two forces operated to make this adjustment, natural in its inception, artificial. One was the way in which Pacific Coast terminals were designated; the other, the entrance of the Santa Fe railroad into transcontinental traffic. The principal Pacific Coast terminals are Seattle, Tacoma, Portland, San Francisco, Los Angeles and San Diego. But Los Angeles is not a seaport and, until recently, San Pedro, through which water traffic moved to Los Angeles, did not enjoy terminal rates. Around San Francisco has been thrown a cordon of points taking terminal rates, to none of which do ocean steamships directly ply. Ventura and Santa Barbara, both on the coast, do not have terminal rates. The result is that today the Pacific Coast terminal situation cannot be said to be the result of a rigid application of any principle based upon sea competition.

While this lack of apparent logicality in the application of terminal rates has served to partially undermine the defense of water competition as wholly controlling in the charging of more to the interior than to the coast, it was the readjustments forced by the Santa Fe that compelled the carriers to fall back upon market competition as a justification for a great part of the existing system of rate-making in the western country. That road became a factor in transcontinental traffic in 1885. Up to that time, the Sunset-Gulf route, operating rail and water between New York and San Francisco via New Orleans, had largely controlled the situation, and commodity rates from points west of the seaboard and east of the Missouri River had been higher to San Francisco than rates from New York. The Santa Fe had its eastern terminus at Chicago. It announced that whatever rates the Sunset-Gulf route made out of New York to the Pacific Coast it would apply from Chicago. It grounded its policy on market competition. The claim was advanced that the great middle west was building up and that it should have its opportunity to compete with the eastern seaboard in supplying the needs of the Pacific Coast.

THE ORIGIN OF THE BLANKET SYSTEM

This attitude of the Santa Fe brought on a rate war, which ended in 1887 with the installation of a new set of rates, this time grading down as they receded from the Atlantic Coast. In 1889 the system of blanketing the class rates—i. e., applying the same rate from or to a larger territory—was inaugurated under the rebate plan. Tariff recognition of this grouping was first made in 1897, following a rate war in which, for four years, there had been no joint through rates to the Pacific Coast from points farther east than Chicago. At that time, with a few minor variations, the same class rates were made from New York, Pittsburgh and Detroit rate points as applied from Chicago, Mississippi River and Missouri River territories; in 1904, even these minor discrepancies were eliminated. Five years later the lower rated classes were cut out of the New York and Boston groups. More recently the graded scale of class rates, with charges scaling down from New York to the interior, has been re-established, but this fact is un-

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

important because practically no carload business moves to the Pacific Coast terminals on class rates. During these years the blanketing of commodity rates has steadily grown, until it has been drawn westward from the strictly sea competitive points two-thirds of the distance across the continent.

While water and market competition have influenced the railroads to thus apply common rates from a vast territory east of the Missouri River to the Pacific Coast terminals, the expediency of treating the intermountain country on the same basis has, apparently, never appealed to the transportation companies. They have recognized the potency of competition as compelling the extension of New York competitive rates as far west as Omaha, a distance of approximately 1,500 miles, but have refused to concede that the influence of ocean competition at San Francisco could or should be extended as far east into the interior as Reno, a distance of only 264 miles. Commercial expansion in the intermountain country has forced some readjustments from the carriers, but, on the whole, the level of rates from the east to the intermountain territory has been above the charges from the same points of origin to the Pacific Coast terminals and the basis of rate-making has been the full back-haul local or some modification of this scale.

Not without protest has an anomalous situation continued to exist. As far back as 1892 Spokane was complaining to the Interstate Commerce Commission; one of the complaints that formed the basis of the orders unsuccessfully attacked in the Supreme Court was filed with the Commission in August, 1906. Against this adjustment, the intermountain country has presented three lines of attack: first, that the long and short haul clause should be rigidly construed; second, that water competition on coast traffic is largely mythical; third, that the terminal rates have not been depressed below the level of normal fair charges. To the proposition that the fourth section should be a hard and fast rule, the Commission declined to give its assent. It held that the way to exceptions to its main provisions should be difficult, but that inflexibility was not its purpose. Likewise, the existence of water competition was also recognized; the Commission found that the influence of the ocean extended as far west as the Buffalo-Pittsburgh line, and, on certain commodities, even farther. The opinion was expressed that for some distances west of Pittsburgh the carriers might properly make rates that would prevent the movement eastward to the seaboard instead of westward all-rail. But it found only the most fragmentary evidence that sea competition extended to Chicago. The carriers themselves admitted that rates from Chicago to Pacific Coast terminals were made to enable the manufacturers and jobbers of the middle west to compete with rivals having the advantage of location on the eastern seaboard.

INDUSTRIAL MOVEMENT WESTWARD

The Commission found that the source of supply from which the western country draws its manufactures has been moving westward within the last quarter of a century. Since 1887, every reduction out of New York has been met at Chicago. While it would not be claimed that this policy was the sole cause of the industrial movement westward, nevertheless there is now hardly a need which the western country has that cannot be supplied from the centers 1,000 miles nearer to it than 35 or 30 years ago. "Rates," remarks the Commission, "that were introduced then purely for market competitive reasons may today be reasonable in themselves. So, too, rates then established from Chicago to meet conditions at San Francisco, a competitive terminal, and justifiably made lower to the more distant points than to intermediate points, may in the course of years have become, by reason of increased volume of traffic, growth of population, and new methods of operation, so reasonable as to make the imposition of higher rates at intermediate points unjustifiable." That this is the situation the Commission caught strong suggestion in testimony given by the late Paul Morton, then vice-president in charge of traffic on the

Santa Fe, in 1901, when traffic was not nearly so large, operation so economical, intermediate territory not yet exploited as today.

While admitting that market competition—"a euphemism for railroad policy"—must be considered as one of the circumstances affecting the rate situation, the Commission declared that the law was amended out of a desire to restrict the force and effect of this competition. It is not enough, as the railroads contended, that the interior be given a reasonable rate; a community is also entitled to a non-discriminating rate. A carrier must view rates as a whole and see to it that they effect no advantage or preference to one community over another which does not necessarily arise out of the transportation advantages which the one has over the other. So viewing the transcontinental situation, the Commission found that the carriers had not shown that undue discrimination was not effected by their adjustment to the intermountain country, nor had they established that the terminal rates, if extended by them from eastern points outside the zone of water influence, were not fully compensatory.

WHAT THE FOURTH SECTION MEANS

In the opinion of the Commission and the court, the fourth section is but a continuation of the prohibition against undue preference and unjust discrimination embodied in the preceding sections of the Act; its intent was to single out one form of discrimination for special condemnation. Since the gravamen of the intermountain complaints has been against unjust discrimination, the readjustment ordered fixes a relationship, not specific rates. For this purpose the country in and east of the Missouri River is divided into five zones. From Missouri River territory, the carriers are forbidden to charge more to the intermountain country than their rates from the same points of origin to Pacific Coast terminals; from Chicago territory, intermountain rates may not exceed terminal charges by more than seven per cent; from Buffalo-Pittsburgh points, 15 per cent; from New York and Trunk line points, 25 per cent. The relationship of rates from the fifth zone, southeastern territory, was not determined.

As previously stated, class rates, as between terminals and interior, were lined up some months ago. Beyond the principles involved, the primary interest to the intermountain country in this decision rests in the changes that it will effect in commodity rates. A commodity rate is a specific charge on a specific commodity and takes that commodity, for the specified haul, out of the general classification. As a rule a commodity rate is lower than the corresponding class rate and it usually applies only on movements in carlots. Therefore, wherever the carriers name a commodity rate to the Coast, they will have to establish commodity rates to the interior on the scale before set forth. Some idea of the scope of this change can be gleaned from an examination of transcontinental and intermountain tariffs. The current California terminals westbound tariff names some 11,000 specific commodity rates. The commodity index to this schedule contains about 3,000 items. The rates named apply from thousands of points of origin to over 100 points of destination. The tariff applying to California, Arizona, Nevada and New Mexico interior points names about 800 commodity rates of general application, about 1,200 applying to special points in Arizona, California and New Mexico and a like number to California and Nevada. The commodity index to this tariff carries about 1,800 items. Moreover, where the intermountain tariff names about 60 less than carload commodity rates, the terminals tariff makes provision for nearly 6,000. The order of the Commission, wherever the terminals enjoy a commodity rate, the intermountain country may demand a commodity rate. This statement, in connection with the figures given, needs no enlargement to indicate the importance, not only to the intermountain country, but to the United States at large, of this decision.

Notwithstanding the fact that the court of last resort has written finis on this case, there are still

two unsettled factors that threaten to retard the final solution of this question. Already the carriers have appealed to the Commission to be relieved from some of the more drastic effects of that body's order. A hearing on this matter has been set for October 6. While official announcement has not yet been made, it is not reasonable to suppose that the cities and industries which have built up a thriving business under the adjustment condemned will surrender their advantages without strong protest; the sufferers under the old regime fought twenty-five years to win relief; that the beneficiaries of the existing basis will give up without a struggle is too great a tax on credulity. In this connection, however, it will be well to remember that the Commission reached its conclusions only after matured thought and only after it had had an opportunity of hearing all phases of the question. Will the railroads and the interested shippers be able to offer evidence that will cause the Commission to reverse itself?

The other uncertain factor is the Panama Canal. In a few months the transcontinental lines will be compelled to meet water competition such as they have never had to face before. The railroads neutralized competition in the past through purchase and subsidy, but by amendment to the Act to Regulate Commerce, made August 24, 1912, Congress has forbidden common carriers to own, operate, or have an interest in competing water lines operating via the Panama Canal. With the opening of this route, the advantage heretofore held by the rail lines in the matter of time will be eliminated. The scheduled time between New York and San Francisco is 13 days, all-rail; via the Panama Canal, it is estimated that the running time will be only one day more. How far will this new route depress rates? The Commission's order requires the intermountain rates to be based on the terminal charges. If the rail lines are forced to make substantial reductions in their through rates on account of Canal competition, will they be willing or financially able to extend the benefits of such reductions to intermountain country? With the expensive investments in terminal properties which they now hold, they cannot very well retire from the coast business, although policy and conditions will undoubtedly force them to nurse interior traffic more than they have in the past. Just how they will meet this impending situation and what relief they may be able to win from the Commission must, for the time, remain unanswered. The hearings in October, however, may furnish some clue.

DECISION VITALLY AFFECTS EVERY SHIPPER
Far-reaching as the effect of the decision of the Supreme Court is with respect to the intermountain situation, it has a scope that transcends even that adjustment in its importance to the country at large. The court not only upheld the ruling of the Commission as to rates to the far western country, but sustained the constitutionality of the amended fourth section of the Act and confirmed the interpretation of powers thereunder announced by the Commission. As the law is read by the Commission, rates in accord with the fourth section principle are to be the general rule; departures therefrom, the exception. Whether exception is to be permitted, the Commission will, in the first instance, decide. The practical effect of this is that the Commission will be the sole judge, for the existence of conditions that would justify a lesser charge for the longer haul is a question of fact, and on questions of fact the Commission's judgment, under Supreme Court rulings of the last few years, is almost absolute. This, in itself, will exercise a restraining influence upon the carriers and serve to reduce the thousands of cases in which the rule of the fourth section is now violated.

But the Commission is more than judge of the existence of conditions that would justify an exception. The railroads contended most strongly that if the Commission found a dissimilarity of conditions as between the long and short haul points, its jurisdiction was then narrowed to a determination of whether the intermediate rate was just and reasonable in and of itself. This

August 15, 1914.

claim the Commission has denied. The law clothes it with authority to prescribe the extent to which carriers may be relieved from the operation of the fourth section. If the exemption from the provisions of the law works no unjust discrimination against the intermediate point, then the application to make the lesser charge at the more distant point will be granted. If it does work this undue discrimination and preference, then the Commission holds that permission to continue such practice should either be withheld or the Commission should prescribe, as it did in the instant cases, the limitations of such exemption. Since the controlling factor in competitive business is not the actual charge, but the relationship of rates to competing points, the fact that the Commission may curb discrimination under the fourth section has an importance that cannot be overestimated. From the time the commerce law was first put on the statute books in 1887, the struggle has always been against

discrimination more than actual excessive rates. One by one the various forms of undue preference have been eliminated; the decision of the Supreme Court now gives the Commission ample power to control one of the most virulent of the old guard of the discrimination family.

Freight rates have always played an important part in business destiny. When it is recalled that existing departures from the fourth section rule run into the thousands and that they will all have to be passed upon by the Commission, the changes that will take place in rate structures in the next few years should be kaleidoscopic. Add to the shifts from this source the uncertainties that trail the opening of the Panama Canal and the further development of our internal waterways and a situation is presented that will call for close study on the part of every shipper in every line in every part of the country.

A Change for the Better

Money Comes Too Slowly for Bill Bean—He Changes His Elevator to a Movie Theater and Pays Off the Mortgage—He Yearns for the Old Life and a Happy Thought Makes Success Possible.

By GUIDO D. JANES

BILL BEAN had lived twelve years on a half of one per cent profit basis handling grain. He was now tired of it and desired to make money quickly and wear something more than one suit a year.

Bookkeeper Wisecarber, who happened to be



THE OPENING NIGHT

making out a bill of lading, paused in his said billing.

"Why don't you go into the moving picture business?" he said, trying to advise his boss. "The field is not pre-empted and you can get rich quick."

"Good idea," returned Bill, "in fact it meets my view exactly. I'll just make my dust collector a ventilator for the audience. My elevator buckets can be converted into chairs, while my wheat sacks I will manufacture into a canvas to throw the pictures on. In case of fire I will empty the elevator through the loading spout. I'll get busy at once."

"Let me be ticket seller?" asked the bookkeeper. "Of course, and at a salary of \$80 per month."

"Thanks, but what are you going to do for a piano player?"

"Swap my automatic grain scale for a pianola."

"A good idea."

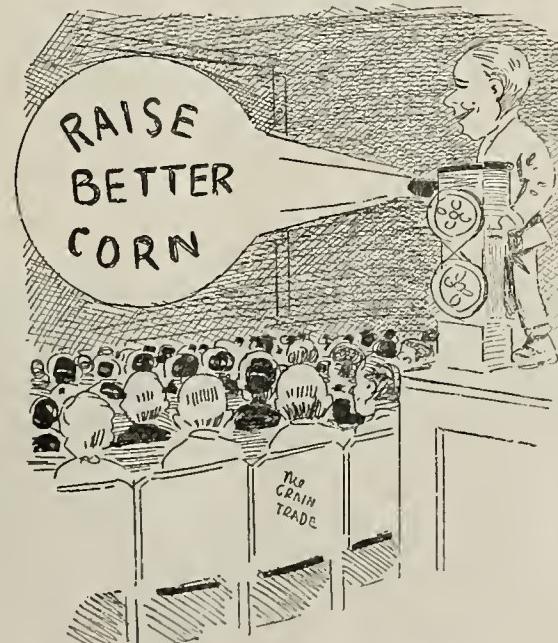
So the two started in at once to convert the elevator into a moving picture theater. Bill scratched

out the word "elevator" on his building and inserted the words "Theater Co." In front he erected an electric sign which announced the fact that there were moving pictures in the vicinity.

When the opening night came everyone in town and out of town swarmed over to Bill's ex-elevator. They came on foot, on wheels, etc., and filled to overflowing the 60,000-bushel building. As the elevator man had a knack for picking out good reels, the place made a hit at once. After which the success of the enterprise was assured.

For this stunt he was written up in all the grain papers, and as a result disgruntled grain dealers from Hudson Bay to the Gulf wrote letters to Bill for pointers and advice. At first he tried to answer them in person but they began to pour in so thick he had three thousand form letters printed off. These he sent out.

The first month of the venture the receipts ran up into the hundreds, and as the electricity was manufactured by a gasoline engine in the elevator the expenses were not much. So he saw his way



THE LAST WEEK OF THE SHOW

clear to buy a new suit of clothes, a hat and a pair of suspenders. He also laid in a supply of after-shave talcum.

"I have never allowed myself over-indulgence in these articles, if at all," he remarked to Wisecarber when he came down wearing the new suspenders, "but times are changed. Just think of having your pockets filled with nickles instead of verbal contracts and promissory notes."

At the end of six months Bill paid off a mortgage

of ten years' standing, and at the close of the fiscal year he had money enough laid aside to send his daughter to Omaha to study music.

It was now that the community began to recognize him. The First National Bank board of directors convened in special session and tendered him a place on the said board. Whereupon the First church got busy and made him superintendent of the Sunday School.

But he was not happy. A longing, founded far back in his apprentice days, was gnawing at his heart.

"I am still a grain man," he remarked to his bookkeeper one night. "You can't change a leopard's spots. I was born an elevator man, I intend to die one. How awful it would be to have lodging on my tombstone the remarks, 'A Successful Movie Picture Theatrical Man.' I will return to my first love no matter what happens, and dwell in happiness with my half of one percent profit."

"That's how I felt all along," returned Wisecarber. "Let's retract."

"We will."

So Bill announced in the papers he would abandon the picture game, but the last week would be farmers' week and they would be admitted gratis. There was an object in this. An object to perpetuate success.

He sent to the Agriculture Department for a batch of films on raising better corn, and a lot of stereopticon films on practical farming.

These were rolled off to the audience on the final week and they made a profound impression. And the consensus of opinion was that if Bill did this for the benefit of the agriculturalist they would reciprocate.

"If ye is goin' ter show us th' way," remarked Householder, a farmer from Pea Ridge, "we are willin' to stand by ye and sell all our corn and wheat to the Bean Elevator Company."

So Bill again got back in the elevator saddle, cocked his feet up on his desk and read the trade papers as of old in an extremely happy frame of mind.

And finally he bought more than one suit of clothes per year.

GUARANTEES OF GRAIN SHIPMENTS REPORTED

On August 3, it was generally reported that the British Government, through the London Corn Exchange, had guaranteed excess war insurance and payment on all cargoes of grain shipped to its ports. While the report boosted the price of wheat, the export situation was not relieved in the slightest degree. Congestion at the ports continues and no grain is shipped. The Southern roads have placed an embargo on export wheat consigned to Galveston and New Orleans, and the Pennsylvania and Baltimore & Ohio Railroads have placed a similar embargo on Philadelphia and Baltimore unless the export grain was consigned to a neutral country, in which case it would not be contraband.

The reports of government guarantees continue to come from England and Belgium, but the conditions demanded prohibit exporters taking advantage of the offers. A further report on August 11, stated that a British cruiser was preparing to collect a fleet of grain vessels from the several Atlantic ports and convoy them across the Atlantic. This report gives evidence of England's good will toward American exporters and also seemed to show that her offer of guarantee was made in good faith as to immediate service. But there is a fly somewhere in the ointment.

In the same papers which contained this last report, was an account of a conference of the leading exporters of the country in New York, who issued a statement to the effect that no solution to the export situation had been evolved, and that a committee of five had been named to try and work out the problem. In the meantime all grain will be diverted to the terminal markets and that domestic mills and storage plants will be urged to absorb as much of the movement as possible.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

The National Hay Association Convention

The Best Meeting the Hay Men Ever Had, at Cedar Point, Ohio, July 14-16—New Hay Grades Established—Membership of 1,000 Attained

THE twenty-first annual convention of the National Hay Association, held at Cedar Point, Ohio, July 14-16, was one of the best ever held by that body. Some of the reasons attributing to this success were: The coming of age of the Association; the reaching of a membership of 1,000; the agreement on the new grades of hay; and a program of exceptional interest and value.

President D. W. McMillen called the meeting to order on Tuesday morning at 10 o'clock. "America" was sung, and the Rev. E. G. Mapes, of the Grace Episcopal Church, of Sandusky invoked the divine blessing. The address of welcome was delivered by Professor James F. Begg, superintendent of the Sandusky schools. Ex-President Wilkinson was to have given the response, but owing to the illness of his wife he was not able to be present, and B. A. Dean, of Auburn, N. Y., took his place in a most acceptable manner, giving, without any preparation, an address which most men could not have evolved even after arduous labor. The formal opening was concluded by the delivery of the memorial address by W. H. Toberman, of St. Louis, which was appropriately dignified and uplifting, after which the entire assemblage stood for a moment in silence out of respect to the memory of those who had passed away.

THE PRESIDENT'S ADDRESS

The reading of the minutes of the previous meeting having been dispensed with, President McMillen read the following address:

As we meet today, in this, our Twenty-first Annual Convention, it becomes my duty and privilege to present to you the report of the Board of Directors.

During the past year we have been passing through, probably, the greatest financial, industrial and social change the American people have faced since the great contest over slavery. Aside from the domestic problems which have demanded the attention of our executives, we have been threatened with international complications which have probably been more serious than we were able to comprehend. These corrections and readjustments, however, came naturally and automatically, and must be faced without prejudice or criticism.

In the hay business as well, the year just closed held in store many surprises. Sections which heretofore have produced a surplus of hay, were heavy buyers. Many predicted an abnormally short crop and purchased all the hay for which they could find storage, without proper discrimination as to grade. Consequently prices soared throughout the early fall. Unmindful of past experiences shippers bought freely at high prices, expecting the extreme values to prevail throughout the year.

However, a mid winter, and excellent fall pasture, found the consumers with a large supply of high priced hay. As a result conditions again reversed themselves; buyers became very exacting as to the quality of goods purchased and the demand throughout the winter months was very moderate at greatly reduced prices.

Throughout the balance of the year it was generally conceded that an average crop of hay had been pro-

duced, and prices have been in the balance, varying materially from time to time according to the prevailing demand of the consumer. The acreage, total yield, and farm value of the hay crop for the past year as compiled by the Agricultural Department shows larger in each instance than any other in the last ten years save 1912.

Although the crop produced was above normal, and a larger percentage of hay than usual was held over from the previous year, the average farm price per ton was exceeded in recent years, only by the abnormally short crop of 1911.

Due to the extreme demand of the consumer during the early fall and the ever-prevailing optimism of the country buyers, prices were forced to a high level, and

Judging by the ardor and enthusiasm with which the officials and membership as a whole have entered into the work of the Association, I feel justified in predicting a greater and more efficient society each year of our existence than we have ever had before.

Agriculture.

The farmer of recent years laboring with the spade and hoe, the sickle and cradle, is rapidly being replaced by the man with a vision of the opportunities which are being offered to him through labor-saving devices, scientific farming and a combination of conditions by which he can farm more with brain than with brawn.

Our population is increasing with great rapidity, having more than doubled itself during the lifetime of many of our members present today. Practically all of our farm land is under cultivation with a decreased yield per acre each year that it is farmed. With these startling facts before us it is not surprising that our nation is beginning to see the necessity for improved agricultural conditions.

Last year, under the supervision of the Agricultural Commission of the State of Ohio, one thousand Buckeye boys were given a free trip to the national capital as a reward for their efforts in increasing the yield of corn in their respective communities. The total expenditure exceeded \$50,000, which was borne by the progressive business men of the state who believe in encouraging agriculture. In our own county one hundred and forty-five boys participated in this contest, fourteen winners being accorded a free trip to Washington. This great army of boy corn raisers produced an average yield of eighty-five bushels per acre, while the average yield of the state, produced by their daddies, amounted to forty-five bushels.

It is no wonder, then, that the young man of the state of Ohio is realizing the necessity for more thorough drainage, deeper plowing, better tillage, crop rotation and the retention of soil fertility, because he realizes that in his chosen pursuit lies hidden treasures which are his to discover.

It is incumbent upon you and me to interest ourselves in bettering rural conditions in our own community. Are we interested in better roads, better schools, experiment farms, county crop improvement associations, farmers' institutes, and other institutions which are being devoted to the study of progressive agriculture? Since America is the recognized granary of the world today, we agree with the man who has said, "the farmer on the farm, farming on a soil-conserving basis, is the most important citizen of the nation to-day."

Grades.

The proper grades for hay has been and no doubt ever will be an important topic for discussion when two or more hay men meet. The same care is not exercised in the harvesting of our hay crop, that it once received. The hay tedder, hay loader and various other farm implements, which of necessity have taken the place of hand labor, have lowered the standard of our various grades of hay, by drying it too quickly and shattering it by rough usage.

The leguminous crops have also of a necessity become more prevalent throughout the central states on account of the fertility which they restore to the soil. As a result our timothy meadows, as a rule, have a heavier sprinkling of clover than in former years. The trade, however, is becoming accustomed to clover mixed hay, its actual value is being recognized and in some markets is taking precedence over the timothy grades. This is a condition which necessarily exists, can not be averted, and should be encouraged because the best interests of agriculture are subserved by its acceptance.

Yet in spite of this fact other markets have raised their standards for grading, both as regards color and clover mixture. As a result the prices quoted for these prohibitive grades are a continual teaser for the optimistic shipper, who ever hopes that his hay will grade two



PRESIDENT W. A. CUTLER
Adrian, Mich.

were lowered as usual, not as market values would suggest, but in many instances only as the bank account of the shipper demanded it.

Membership.

The membership of this body is the scaffolding by means of which our Association has grown into a living, working organization. It is with genuine pride that we can report at this time the largest enrollment our Association has ever enjoyed. I further believe the members who have worked loyally to reach the 1,000 mark have had in mind the necessity of increasing our membership with men whose ideals, business integrity and moral worth are above reproach; because these are the basic principles upon which our organization was founded and upon which it must ever stand.



GROUP OF MEMBERS AND VISITORS IN ATTENDANCE AT THE TWENTY-FIRST

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

95

or three notches higher than his own good judgment tells him it will.

Too many grades of sound hay in either the timothy, mixed or clover grades is confusing and should not be upheld by our Association. Our Grades Committee, however, have gone carefully over this subject, have advised with the markets over the country who are using our grades and are prepared to give us a comprehensive report, and we endorse what they expect to recommend.

Transportation.

Advanced freight rates, and a charge for the transit privilege on hay have been the all-important problems which the Transportation Committee have had to deal with during the present administration.

While the total earnings and dividends paid by all railroads of the United States, for the year 1913, were the greatest in their history, the same fact did not hold true for the railroads in the Central Freight Association. The transportation companies within this territory claim that their income is not sufficient by \$50,000,000.00 to meet their needs. On this question our Association has remained non-committal, while the reconsigning charge on hay has been vigorously opposed. These two questions, however, have become inter-dependent in view of the fact that the opponents of increased rates have demanded that the carriers abolish all free services which they now perform.

This matter has been handled efficiently by our Transportation Committee, through correspondence with the various traffic officials, meeting with the special committee from the Central Freight Association and the filing of an informal protest with the Interstate Commission. Had this matter not been brought forward in the rate case hearing our efforts in all probability would not have been futile. This matter, however, will be handled in detail in the report of our Committee on Transportation.

Directors' Meetings.

The Board of Directors met immediately after the close of our Peoria convention. Cedar Point was chosen as the place for holding our next annual convention, and the date was set for July 14, 15, and 16, 1914.

Committees were selected as follows:

Executive—E. Wilkinson, Chairman; P. E. Goodrich, R. B. Clark.

Finance—B. A. Dean, Chairman; J. D. Cole, H. W. Robinson.

Membership—H. A. Bascom, Chairman; W. A. Cutler, A. D. Campbell.

Annual dues were left as they were. Mr. J. Vining Taylor was elected Secretary-Treasurer for another year, and his salary fixed at twenty-two hundred dollars.

Another meeting was held in Winchester, Ind., February 19, 1914. The contract made by the president and secretary of this Association, with Cleveland hay dealers with respect to national hay inspection in Cleveland, was ratified, and the secretary instructed to advise our membership of the firms in Cleveland who were using national hay inspection.

The Grades Committee were instructed to look into the matter of revising our grades and report to the next convention.

The president and secretary were instructed to communicate with the Secretary of Agriculture at Washington, D. C., advising him that at any time the Department desired to consider the formulation of rules and regulations for the inspection of hay and straw, entering interstate commerce, that our Association stood ready to co-operate with them.

The ever-important question concerning the proper baling, weighing, loading and handling of hay in general was thoroughly discussed, and as a result some valuable suggestions were published, in the form of a booklet.

One of these documents should be in the hands of every shipper today. Its suggestions are sound and concise. Receivers may procure any quantity from the sec-

retary at the actual cost of publication. The opportunity of placing these booklets in the hands of shippers at an insignificant cost, should be accepted by receivers, alike in all markets.

Personal.

The effectual work of the various committees, State vice-presidents, and individual members holding no official position, is highly commendable.

The trade journals have at all times been mindful of our best interests. The information which we have obtained through their columns from time to time is worthy of our consideration. Our suggestions and criticisms at all times are gladly received by them, as well as our subscriptions. They deserve our support.

I desire particularly to call your attention to the tireless efforts of your secretary. He has been on the job every working day since our last convention. He has assisted the various committees ably and conscientiously. He has responded promptly to every call; and in all instances I am sure his actions were prompted from pure and honest motives. His able and hearty co-operation can only be thoroughly appreciated by one who has been

sweat of his brow, the effort of his brain, or the anguish of his soul."

In his report for the Legislative Committee, P. E. Goodrich, of Winchester, Ind., spoke of the added power which had been given to the Interstate Commerce Commission by the decision of the Supreme Court in the Inter-Mountain Rate Case, which is discussed at length on another page. He also spoke of the Pomerene Bill of Lading Bill which has passed the Senate and is now before the House of Representatives, and of the importance of every member of the Hay Association writing his representative to have the bill passed. He urged upon every member to report to the secretary every case which came before his notice, in which the Pure Food Departments of the state or national government condemned shipments of hay because of weed mixtures or mustiness.

A brief report of the Joint Hay and Grain Committee was read by the chairman, H. C. Jones, of Baltimore, Md. As no specific matters were referred to this committee the report dealt with general conditions in the trade as represented by the National Hay and the National Grain Dealers' Associations. In regard to the tariff he said: "It is evident that the effect on our general grain markets of foreign competition will continue to be more sentimental than actual, as far as the quantity imported is concerned, but we must not lose sight of the fact that the new tariff on coarse grains will act as a safety valve hereafter and will undoubtedly fill the purpose for which it was designed, to prevent the manipulation of one central market to the detriment of not only the consumer but of every individual who participates in the handling of grain." He spoke of the differences in grading in the several markets and the necessity for national grades, and also of the value of closer affiliation with the Grain Dealers' Association.

N. W. Cunningham, of Bluffton, Ohio, spoke at length on "Some Problems of the Past, the Present and the Future." He spoke without notes and covered a wide variety of subjects as the general nature of the address prompted.

CROP IMPROVEMENT REPORT

The report of the Crop Improvement Committee, read by Chairman T. J. Hubbard, of Birch Run, Mich., was, in part, as follows:

The Chairman of your Crop Improvement Committee, while a very important subject has been assigned to him, can report but very little progress made in this field, in a personal way, except in the locality where I reside.

It is my belief, however, that during the past year we have seen a greater interest taken by the public at large, as well as by the farmer, in the subject of agricultural improvements, than has ever been manifested in any like period heretofore.

There are many ways by which greater yields can be secured, first, by always securing the best grades of seed; second, by plant breeding; third, proper fertilization of the soil, and fourth, rotation of crops.

Taking up each item separately, we will first mention seed. Too much care cannot be used by the farmer in



SECRETARY J. VINING TAYLOR
Winchester, Ind.

in close touch with him, as I have during the year just closed.

A year ago I was chosen as your president. The honor at that time was fully appreciated, but the responsibility which this honor carried with it, has been more fully appreciated each day I have served as your executive. If I have been worthy of the honor you repose in me, I give credit to the kindly spirit of the membership engaged in this great work.

The time which I have devoted, the energy which I have exerted, the service which I have attempted to render this Association, I count not a sacrifice. If we are to become a real integral part of this great organization, which stands for honesty and honor in business methods, it is necessary that we render it somewhat of service.

Let us remember, my friends, that only those things become real or helpful to any man, "which has cost the



ANNUAL CONVENTION OF THE NATIONAL HAY ASSOCIATION, CEDAR POINT, OHIO

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

selecting the seed whether it be timothy, clover or alfalfa.

In the 1913 session of the Legislature in Michigan, there was passed a bill known as Act 202 to regulate the sale of agricultural seeds in Michigan. This law went into effect August 15, 1913.

It was not long after this law went into effect and was published through the press of the state, that its effect became apparent. Farmers who had seed that was not up to the standard sold it to the elevator man and bought in its place the best grades of timothy and clover. As a result the new meadows in our state this year are much cleaner, and the farmer who harvested his crop at the right time will secure a better price per ton for it than he would have had if he used the seed which he raised himself the year previous, or purchased seed which was not strictly pure.

Plant breeding is just as essential to good crops as stock breeding is to good stock.

Third: Proper fertilization. The food supply of a country can always be increased by improving the fertility of the soil. In the last two years our farmers have made wonderful progress along this line, and as a result we harvested in the United States this year the largest crop of hay, grain and other farm products ever known in the history of the country. The improving of the fertility of the soil can be done with commercial fertilizers, but a better way is by raising of cattle and other stock and putting the manure back on the land.

The producer, whether or not he uses commercial fertilizers or manure, should know that when hay is removed from the farm, there is a loss of fertilizing elements which are of value to him, but not to the city feeder. There is quite a difference in the amount of plant food contained in different kinds of hay plants. For example, one ton of timothy hay contains on an average 20 pounds of nitrogen, 10 pounds of phosphorus and 28 pounds of potassium. If bought in the form of commercial fertilizers, nitrogen is worth 20 cents per pound and the other two elements are valued at 5 cents per pound. On this basis the fertilizing value of a ton of timothy hay will amount to about \$6.00 per ton. One ton of clover hay contains on an average 40 pounds of nitrogen, 8 pounds of phosphorus and 40 pounds of potassium, which makes its fertilizing value amount to about \$10.40 per ton. According to these figures it would seem that there was less loss of plant food in growing timothy than when clover was grown. However, such is not the case, for clover and all other leguminous plants store up nitrogen in the soil. We find when comparing the loss of fertilizing elements of clover and timothy there is a difference of about \$3 per ton in favor of clover hay. Just how much of this amount should be charged to the hay when considering the profit from selling hay cannot be stated definitely, for the kind of soil, system of rotation used, and type of farming play important parts in keeping up the crop producing power of the soil. Timothy is often said to be hard on the soil. This is because neither timothy or any other grass can add any plant food to the soil in the manner that the legumes do, but must get all of its food from the soil. Therefore it is much more exhaustive of the available plant food in the soil than clover.

Rotation of Crops.

The fourth and most essential element to consider in successful farming is crop rotation. When crops are sold from the farm year after year and no attempt is made towards a systematic rotation, and especially when legumes are not grown, the land in the course of time will become low in available plant food. Many farmers continue to cut hay from their meadows long after the entrance of weeds and foreign grasses, that not only lower the grade of the hay produced, but it also lessens the yield by so exhausting the soil that the quantity harvested is not sufficient to pay for the labor. The most satisfactory method is to include the meadow in the regular rotation of crops in which legumes, such as clover, alfalfa, cowpeas or soy beans are grown, and sufficient barnyard manure or commercial fertilizers, or both are used so as to maintain the fertility of the soil. By this means hay becomes a staple crop as corn, wheat, oats, rye or beans, instead of a by-product, and the farmers can count on very satisfactory returns from that part of the product of their farms. How long a meadow should remain in hay is a question that can be easily determined by studying conditions such as decreasing yield and the appearance of grasses and weeds. The length of time a field should remain in hay also depends on the fertility of the soil, the treatment it has had in the way of reseeding and the application of barnyard manure or commercial fertilizers. A newly seeded timothy meadow on good soil should yield 2 tons or more of hay the first year. After the second year the yield begins to decrease until it will run for $\frac{3}{4}$ to $1\frac{1}{2}$ tons to the acre. In planning a cropping system it is seldom advisable to keep the meadow in hay longer than three years and two years is better, especially if the land has been pastured heavily with livestock during the late summer and fall months after the season's crop of hay has been removed.

Secretary Taylor read the report of the chief inspector, C. J. Sealy, of Cleveland, whose work covered the inspection of 2,624 cars of hay with reinspection on 16 cars.

President McMillen appointed the following special committees:

Nominations: Messrs. Robinson, Lees, England, Brubaker, Morgan, Ramey and Carter. Resolutions: Messrs. Sale, Steen, Wade, Cole and Dean. Auditing: Messrs. Leonard, Bascom and Nichols. Credentials: Messrs. Williams, Gregg and Clark.

WEDNESDAY MORNING SESSION

The second session, which was called promptly on the appointed hour, was opened by the president, who called upon Egil Steen, of Baltimore, for the reports of the vice-presidents. The reports dealt largely with membership and crop reports, a summary of the latter being as follows:

Iowa—Old crop practically cleaned up; prospects for new crop best in years.

Arkansas—Suffering from dry weather, unless situation is relieved by early rains this territory will not make any hay to speak of this year.

Oklahoma—First cutting of alfalfa practically a total loss on account of weeds and rainy harvest weather.

Virginia—Old crop about cleaned up; new crop very short on account of dry weather, not more than one-third of a crop.

Illinois—Central and southern portions dry with very short crop; northern territory very good.

Nebraska—Hay crop is alfalfa, wonderful crop for 1914.

North Carolina—Spring crop short; most of hay is raised in the fall.

Tennessee—About half a crop of timothy and clover; weather dry.

New York—Hay crop very promising; more alfalfa grown every year.

Michigan—Very little old hay in farmers' hands; new crop about an average.

Maryland—Dry weather cutting the production very materially.

Ohio—In the southern part of the state the crop will be light as a large part of it has already been put up without rain.

STATISTICS

The reports of the vice-presidents were supplemented by the report on statistics, read by B. A. Dean, which were in part as follows:

The Government reported the condition of the hay crop on July 1 at 80.8 per cent, and after a careful survey of the situation as the means at hand afforded, your Committee find the following conditions in the locations named:

The New England States—Very short crop on account of dry weather.

The Southern States—Very light, with heavy importation indicated to supply the demand.

Central and Middle States—Normal crop, with alfalfa in excess of last year. Timothy slightly below normal; clover appreciably lower.

Michigan—Above normal in quantity.

Wisconsin-Minnesota—15 to 20 per cent above last year, and the supply of clovers will undoubtedly be found in those latter three states.

The supply of alfalfa from Kansas, Colorado, Oklahoma, etc., is in excess of former years probably 20 per cent, and reports indicate that it is being harvested in good condition.

Your Committee is inclined to believe that the crop of 1913 has been largely marketed, with light stocks remaining at shipping centers. An early demand is therefore indicated for the 1914 crop.

One of the most interesting of the addresses of the convention was delivered by J. C. F. Merrill, secretary of the Chicago Board of Trade. His subject was: "Pending Federal Legislation Relating to Marketing Farm Products." In the clear and comprehensive manner for which he is noted, Mr. Merrill discussed the Moss Bill or the Grain Grades Act, as it is called. He told what it would accomplish and pointed out its advantages over a system of Government inspection. He then spoke of the Pomerene Bill, the necessity of a speculative market, and the differences between such markets and the bucket shops with which they have often been confused, and which have given the legitimate exchanges a bad name. The address consumed over an hour and was listened to with the closest attention.

TRANSPORTATION

The report of the Committee on Transportation was read by H. H. Driggs, of Toledo, as follows:

Traffic conditions for the past year have been satisfactory in a general way. Your Transportation Committee have had a number of sessions with the Committee of the Central Freight Association regarding "Transit Rules on Hay and Straw."

The rules as put in force by the Central Freight Association are not satisfactory, and your committee filed an informal protest with the Commission protesting against their being enforced, also requesting suspension of operation of said rules pending a hearing. As the Commission declined to suspend operation, these rules

became effective June 1, 15 and 20, 1914, on the various railroads. The Commission have not been inclined to even favor us with a hearing. As this was practically the close of the season, there has been but very little, if any, hay moved under the new ruling.

The new transit rules carry a charge of \$3.00 per car for the privilege of re-consigning hay and straw in transit, and also places transit houses under the Joint Rate and Inspection Bureau, thereby forcing them to carry a bonded weighmaster and furnish the railroads with the actual weights free of charge. This charge of \$3.00 will make it impossible to operate transit houses. The Commission seem to be under the impression that hay and straw, although cheap commodities, should bear not only a high rate in fifth class, but be penalized with an unbearable burden.

In order to operate a transit house to handle hay and straw properly under the new transit rules, it will cost over \$5.00 per car for the labor and weighing, as each bale must be weighed and tagged and reports made to the Inspection Bureau. This charge of \$3.00 per car, together with the labor expenses makes it cost about \$8.00 per car, which is prohibitive.

Therefore, your Committee recommends that some action be taken at this convention, authorizing them to insist upon a hearing before the Commission.

Also that the attention of the incoming Transportation Committee be directed to the additional burden which will be placed on carload shipments of hay, providing the carriers are permitted to advance their freight rates 5 per cent or more. Hay traffic is bearing all the burden it can at the present time, and if the carriers want additional revenue for service of moving hay through hay sheds, I think the Association should go on record as recommending the taking of hay out of the official classification, and make separate rates equal to the amount of \$3.00 per car, which they propose to add when it is handled through hay sheds.

An address on "The Relationship Between Receiver and Shipper," by C. C. Ramey, of New York, closed the morning's session. This address will be given in full at another time, as it contains much of value but is too long to be contained in this report.

WEDNESDAY AFTERNOON SESSION

The report of the Committee on Arbitration, the first business of the afternoon session, was of particular interest, as this is the first year the cases for arbitration have been handled at meetings of the committee instead of by correspondence. The new method proved to be very successful and will undoubtedly be continued. It was read by M. C. Niezer, of Ft. Wayne, Ind. He reported that 107 cases involving trade disputes have been submitted to the secretary of the Association during the past year. Seven of these cases were handled by the Arbitration Committee and awards rendered in each case; 21 cases were compromised through the efforts of the secretary; two cases were withdrawn; 66 of these cases were of lesser importance, but are a matter of record in the secretary's office; five members were suspended because they refused to arbitrate; three cases were appealed to the Board of Directors, and in each case the Arbitration Committee's award was sustained by the Board of Directors.

In concluding, Mr. Niezer called attention to the second and thirteenth rules of the Association. The violations of these two rules are what makes most of the trouble and they should be read and studied carefully by the trade.

Professor E. G. Holden, of the International Harvester Company, gave a talk on alfalfa which is to be found on another page. For over two hours he held his audience spellbound, and they would have cried for more than if there had been time. Professor Holden's magnetic personality can hardly be duplicated on the lecture platform, certainly not among those who specialize in agriculture.

THE REPORT OF THE GRADES COMMITTEE

The new hay grades was one of the important subjects before the convention. For months the Committee had been working on these grades, consulting the leading hay men in all parts of the country. On Tuesday afternoon a conference was called at which all who were interested were invited. This conference was in session nearly three hours and was attended by about fifty of the delegates. Each grade was taken up in turn and everyone had an opportunity to express his opinion. The discussion covered the ground very thoroughly. It was frank and open, often lively, but Chairman F. L. Young, of Lansing, Mich., always had the

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

97

meeting well in hand and there was almost no waste of time. It was a very profitable session. The report of the Committee before the convention was practically the sense of this meeting. There was considerable discussion over the grade "choice," but the vote against it was overwhelming. Good threshed hay was placed in the "sample" class instead of in the "no grade." The vote to have no further change for three years was carried. The grades as adopted are as follows:

Hay Grades.

No. 1 Timothy Hay—Shall be timothy, with not more than one-eighth ($\frac{1}{8}$) mixed with clover or other tame grasses, may contain some brown blades, properly cured, good color, sound and well baled.

No. 2 Timothy Hay—Shall be timothy, not good enough for No. 1, but over one-fourth ($\frac{1}{4}$) mixed with clover or other tame grasses, fair color, sound and well baled.

No. 3 Timothy Hay—Shall include all timothy not good enough for other grades, sound and reasonably well baled.

Light Clover Mixed Hay—Shall be timothy mixed with clover. The clover mixture not over one-third ($\frac{1}{3}$), properly cured, sound, good color and well baled.

No. 1 Clover Mixed Hay—Shall be timothy and clover mixed, with at least one-half timothy, good color, sound and well baled.

No. 2 Clover Mixed Hay—Shall be timothy and clover mixed, with at least one-fourth ($\frac{1}{4}$) timothy, reasonably sound and well baled.

No. 1 Clover Hay—Shall be medium clover, not over one-twentieth ($\frac{1}{20}$) other grasses, properly cured, sound and well baled.

No. 2 Clover Hay—Shall be clover, sound and reasonably well baled, not good enough for No. 1.

Sample Hay—Shall be sound, reasonably well baled, mixed, grassy, threshed or hay not covered by other grades.

No Grade Hay—Shall include all hay musty or in any way unsound.

Choice Prairie Hay—Shall be upland hay of bright, natural color, well cured, sweet, sound, and may contain 3 per cent weeds.

No. 1 Prairie Hay—Shall be upland and may contain one-quarter midland, both of good color, well cured, sweet, sound, and may contain 8 per cent weeds.

No. 2 Prairie Hay—Shall be upland, of fair color, and may contain one-half midland, both of good color, well cured, sweet, sound, and may contain 12½ per cent weeds.

No. 3 Prairie Hay—Shall include hay not good enough for other grades and not caked.

No. 1 Midland Hay—Shall be midland hay of good color, well cured, sweet, sound, and may contain 3 per cent weeds.

No. 2 Midland Hay—Shall be of fair color, or slough hay of good color, and may contain 12½ per cent of weeds.

Packing Hay—Shall include all wild hay not good enough for other grades and not caked.

Sample Prairie Hay—Shall include all hay not good enough for other grades.

Alfalfa.

Choice Alfalfa—Shall be reasonably fine leafy alfalfa of bright green color, properly cured, sound, sweet, and well baled.

No. 1 Alfalfa—Shall be reasonably coarse alfalfa, of a bright green color, or reasonably fine leafy alfalfa of a good color and may contain 2 per cent of foreign grasses, 5 per cent of air bleached hay on outside of bale allowed, but must be sound and well baled.

Standard Alfalfa—May be of green color, of coarse or medium texture, and may contain 5 per cent foreign matter; or it may be of green color, of coarse or medium texture, 20 per cent bleached and 2 per cent foreign matter; or it may be of greenish cast, of fine stem and clinging foliage, and may contain 5 per cent foreign matter. All to be sound, sweet and well baled.

No. 2 Alfalfa—Shall be any sound, sweet and well baled alfalfa, not good enough for Standard, and may contain 10 per cent foreign matter.

No. 3 Alfalfa—May contain 25 per cent stack spotted hay, but must be dry and not contain more than 8 per cent of foreign matter; or it may be of a green color and may contain 50 per cent of foreign matter; or it may be set alfalfa and may contain 5 per cent foreign matter. All to be reasonably well baled.

No Grade Alfalfa—Shall include all alfalfa not good enough for No. 3.

Straw.

No. 1 Straight Rye Straw—Shall be in large bales, clean, bright, long rye straw, pressed in bundles, sound and well baled.

No. 2 Straight Rye Straw—Shall be in large bales, long rye straw, pressed in bundles, sound and well baled, not good enough for No. 1.

No. 1 Tangled Rye Straw—Shall be reasonably clean, rye straw, good color, sound and well baled.

No. 2 Tangled Rye Straw—Shall be reasonably clean, may be some stained, but not good enough for No. 1.

No. 1 Wheat Straw—Shall be reasonably clean wheat straw, sound and well baled.

No. 2 Wheat Straw—Shall be reasonably clean; may be some stained, but not good enough for No. 1.

No. 1 Oat Straw—Shall be reasonably clean oat straw, sound and well baled.

No. 2 Oat Straw—Shall be reasonably clean; may be some stained, but not good enough for No. 1.

The recommendation of the committee, that the vice-president in each state act as arbitrator of grade disputes, was carried.

REPORT OF SECRETARY

Secretary J. Vining Taylor presented his report as follows:

The secretary of an organization of this character must be a repeater, that is to say, my annual reports must bear likeness. It is indeed an honor and with great pleasure that I submit to this convention my fifth annual report as your secretary-treasurer.

The closing year, from the average hay man's point of view, has been a satisfactory one. The prices have been good, in fact the 1913 hay crop showed the highest average farm price per ton (\$12.43) ever paid with the exception of the 1911 crop, which showed an average of \$14.64, the 1912 crop of hay, of course, being the largest ever produced in this country, last year being the second largest. Tame hay and forage acreage harvested in 1913 is estimated at 2,142,762 acres. This is about 11 per cent less than in 1912, when it was 2,414,889 acres. The yield shows a much larger decrease, being but 2,175,735 tons as compared with 3,333,862 tons in 1912. The average estimated yield for the present year is approximately one ton (1.015) per acre for all cuttings combined. The yield in 1912 was 1.3 tons per acre. The value of the present crop, figured at \$13.36 per ton, is \$29,063,473.

The prairie hay crop, harvested from 127,963 acres,

you that we have succeeded in bringing about the adoption of these grades in Detroit, Mich.; Memphis, Tenn., and Mobile, Ala. We have also tried with all means at our command to get the markets which are using our grades in part only to adopt them in full. In this we have failed.

Inspectors have been suggested for Mobile, Cincinnati, St. Joseph, Mo., and St. Paul, Minn., that is, inspectors to work under the same plan as The National Hay Association Inspector at Cleveland today. Our Grades Committee has a most able Chairman who has made his report this morning, therefore, anything more that I might say would be covering the same ground.

Road and Convention Work.

Your Secretary has endeavored to be present at local and state conventions, but it is almost impossible to be at all of them. This, however, keeps us in the eye of the public and unless otherwise ordered we will continue this. Also will our road work be given as much time as we can spare from the office. A visit in person from the president or secretary has a good effect and we gain friends and members by this line of effort. It was my pleasure during the year to have with me on some of my trips our president, Mr. McMillen, and Mr. Cutler, one of our directors. This was an honor not only to the gentlemen called upon but to your secretary to have these gentlemen travel with him. This, of course, had its good effect and we hope it can be continued from time to time when convenient.

Official Emblem.

We would like to impress upon you, gentlemen, and the membership at large, the importance and necessity



THE NEW OFFICERS AND DIRECTORS

amounted to 100,955 tons, valued at \$1,163,236. The 1912 crop, harvested from 142,730 acres, amounted to 167,098 tons, valued at \$1,400,700.

I am pleased to report the present crop, while slightly below normal, is being harvested in fine shape, the old hay being practically all cleaned up, leaves a nice clean market to work with.

Investigation and Information.

This work has become a fixture in our office, and you would be surprised how our members use this Bureau (as we term it). Hardly a day passes but what we get inquiries from some member as to the standing, responsibility, etc., of some firm. It was through the untiring efforts of The National Hay Association that the Johnson-Interstate gang at Goshen, Ind., were put out of business by the Federal authorities. Our bulletins always contain information of this character and you would materially assist us if you would report anything of this kind to us promptly. In some instances we have saved members enough to pay their dues for years to come. Don't forget this, please, as we are always glad to have you write us along these lines. This line of work makes us stronger and more beneficial.

Crop Reports.

Our crop reports have been issued as usual and we have endeavored to give our members all information obtainable and interesting. Wish to caution and request members, when called upon for reports in their section, to reply by first mail. If these crop reports are to be of benefit, we must get them to our members, while the figures are fresh. Please bear this in mind and co-operate.

Literature and Printed Matter.

Our Association has, for a number of years, advocated the general distribution of literature pertaining to the advancement and improvement of the production and handling of hay and straw. Therefore, thousands of pieces of matter have been sent out by our office and through the hands of some of our members. We shall continue to work along these lines, and if you can use advantageously any matter we issue, we would be glad to send it to you promptly.

Grades.

As usual much attention has been given to the very important question of grades, in connection, of course, with our Grades Committee. I am pleased to inform

of using on your stationery our official emblem. We furnish these cuts or half tones to any of our members upon application for the small sum of 35 or 50 cents, there being two sizes. So when you get out your new stationery, send for one and use it freely. It advertises your Association and gives you a mark of distinction and standing in the trade.

Reconsigning Privileges.

This has been a most absorbing topic, but it has been handled with diplomacy by the Chairman of our Transportation Committee, Mr. H. H. Driggs. The National Hay Association petitioned the Interstate Commerce Commission to suspend the operation of charges as outlined in Rule 14 Michigan Central Railway Co.'s "Rules covering transit privileges." M. R. C. 1073 is issued April 24, 1914, better known as "stop-off or switching charges." We have recently learned that the Commission has deferred the effectiveness of this until October 29, next. Mr. Driggs, however, has reported fully on this matter so we shall not dwell at length thereon.

Acting upon instructions from our last convention, resolutions as to the proper papers to support railroad claims being procured by Chambers of Commerce, Boards of Trade, etc., when receivers make returns to shippers, were sent out from our office. Very little, if anything, has been done by these various Boards and Chambers other than follow the methods now in existence.

We have had occasion during the past year to call upon our state vice-presidents for their assistance in investigating matters in their section of the country and report to this office. I am pleased to say to you, gentlemen, that this has proved very satisfactory and I am sure it has saved several arbitration cases and a lot of hard feelings. When the secretary calls upon you as a representative of our Association, to investigate anything in your community, please be kind enough, when convenient, to comply with our request and all expenses will be paid promptly.

In Memoriam.

Father Time, in his flight, has been merciful to us this year, as out of over 900 members, we have only had reported five deaths. Resolutions of respect have been promptly drawn up in each case by your Memorial Committee. List of deceased members were incorporated in the Committee's report yesterday. One death has been reported since this report was made.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

Statistical.

Receipts, all sources.....	\$14,804.75
Disbursed	7,561.82
Balance on hand July 1, 1914.....	\$ 7,242.93
Membership.	935
Actual membership June 24, 1913.....	65
Expelled for non-payment of dues.....	1
Lost by death.....	28
Resigned	40
Suspended	5 139
	796
Joined during the year 1913-14.....	204
Present membership	1,000

The substantial growth in both membership and finances the past year as my report shows, has in a large measure been brought about through the immense amount of work done by President McMillen. He has been untiring, leaving no stone unturned to better the Association and strengthen it in every way. My work this year with him has been one of extreme pleasure. It has been a privilege, yes, an honor, to be associated with a gentleman whose morals and ideals, both in and out of business, have been so high. I have always found him ready and willing to co-operate with our office in matters relating to the improvement of conditions in the trade. Quick, conservative, unassuming and still alert to the conditions, his fine personality and good, genial nature has made for our Association many warm friends.

I would be ungrateful, indeed, did I not acknowledge the many courtesies and favors shown me during the year. Members always respond cheerfully to our many requests for information and to help us in any way we ask. Your secretary would not be able to accomplish very much were it not for your devotion and unselfish service.

Trust you may have a very profitable and pleasant season in handling the new crop, and that God in his mercy will watch over and protect you and yours.

The secretary's report and that of the Auditing Committee were adopted.

NOMINATION COMMITTEE REPORT

The Nomination Committee made the following recommendations for the following year:

For president: W. A. Cutler, of Michigan; for first vice-president, J. D. Cole, of Kansas City; for second vice-president, Fred Ahel, of Ohio; for directors for two years, D. W. McMillen, Ohio; Samuel Walton, Pennsylvania; D. S. Wright, New York; Robert M. White, Minnesota; J. J. Fairbank, Virginia; for director for one year, P. E. Goodrich, Indiana.

Bert Ball, secretary of the Crop Improvement Committee of the Council of Grain Exchanges, offered a resolution which was referred to that committee.

THURSDAY MORNING SESSION

After President McMillen had called the final session to order, the special committee reported on the address of the president, which was adopted. Mr. Sale reported for the Resolutions Committee. All of the resolutions were adopted as follows:

Thanks to the Officers.

The year now closing has been one of importance and unusual prosperity in our affairs, due largely to the activity and wisdom of our executive officers. Be it therefore

Resolved, that we express our most sincere appreciation of the untiring efforts of our worthy president, Mr. D. W. McMillen. He has been faithful to the trust committed to him and with the assistance of our invaluable secretary, Mr. J. Vining Taylor, has succeeded in reaching the goal of 1,000 members, which was set as the mark at the beginning of the year. The fruit of the work of these faithful officers is seen in this, the most successful convention we have held in point of numbers, enthusiasm, and splendid program provided for our entertainment and instruction.

Resolved, that our thanks be expressed to the staff of officers who have ably assisted our executives in the discharge of their duties during the year.

Speakers Are Remembered.

Resolved, that we record our appreciation of the pleasing and agreeable welcome extended by Professor James T. Begg in behalf of the city of Sandusky, and the able addresses of Mr. N. W. Cunningham, Mr. J. C. F. Merrill, and Professor P. G. Holden. That the thanks of the Association he also extended to all the members contributing to the success of the program.

Resolved, that the Association heartily commend the good work of Mr. T. J. Hubbard, sergeant-at-arms, for his faithful work during the sessions, and Mr. F. G. Nichois, assistant to the secretary, who has been faithful to his duties from early morn until late at night, from the hours that the secretary's headquarters were established.

Pomerene Bill Endorsed.

Resolved, that we endorse the Pomerene Bill of Lading measure now before Congress, having passed the Senate and now pending before the House of Representatives; and we urge our individual members to confer with their representatives and urge them to support this measure which is of vital importance to every carlot shipper, and that they use their best efforts to advance the bill to final passage during the present session.

Arbitrators for Disputes.

Resolved, that we call the attention of our members to the action of this convention, in providing for arbitrators or referees in case of disputes or misunderstandings between our members with reference to the grades of hay shipped on contract by the appointment of our state vice-presidents as official state inspectors, and we urge our members to take advantage of this opportunity to settle disputes quickly and fairly when it shall become necessary. The work of our chief inspector, Mr. C. J. Sealy, during the past year has grown remarkably and proven satisfactory to those who have used him. We recommend this department to our members and urge them to obtain official inspection by the Association when possible.

Crop Improvement.

Whereas, the hay production of the United States, both in quantity and quality, is not keeping pace with the production of cereals; be it

Resolved, that we again commend the efforts of the Crop Improvement Committee of the Council of Grain Exchanges to establish hay, especially alfalfa and clover, in the crop rotation, that each member of the National Hay Association pledges himself to co-operate with this great movement, each in his own vicinity, to form a County Farm Bureau in charge of a paid agricultural agent representing the United States Government, the State Agricultural forces and the local Association for that purpose.

THE NEW OFFICERS

Upon vote the rules were suspended and the secretary was instructed to cast the unanimous ballot for the officers as proposed by the Nominations Committee. On turning over the gavel of office to his successor Mr. McMillen said:

Gentlemen, in presenting the gavel to our newly elected president, in many respects it is with somewhat of regret. If my good friends during the present administration have had any criticisms, they have been kind enough to keep them to themselves, and to me they have said only the kind things. The membership of the National Hay Association I consider as friends a thousand strong. It becomes my duty to retire as president of the Association, and my privilege to step into the ranks again of the common rank and file of the Association. And I promise to the incoming president, Mr. Cutler, a man who lives just across the line from me in Michigan—I promise him, as I am sure the entire membership of this Association promises you, Mr. Cutler, our undivided efforts in the interest of your administration.

Gentlemen, you have elected a president here who any of us who do know him know him to be of a character above reproach and we know that his energy is all that any man's energy can be, and that the good which he will do for this Association is unquestioned. Again, Mr. President, I wish to pledge to you my earnest support during your administration.

Newly-elected President Cutler responded as follows:

Mr. Retiring President, gentlemen and ladies of the Association: I do heartily appreciate the honor that is mine this morning, and I do appreciate the confidence that you have placed in me in placing me in this important position in this large trade organization. It is embarrassing to follow a man like Mr. McMillen. His administration, as we all know, has been a wonder. His tact in handling men is wonderful, and, best of all, is the fact that he has reached his goal as far as the membership is concerned, that of 1,000. I desire to congratulate Mr. McMillen, and with him also the secretary, Mr. Taylor, in reaching this goal, for it is a figure that many presidents have striven for, and you, Mr. Retiring President, were the first one to attain it. I realize the responsibilities that are placed upon me; I realize the efforts that it involves; and I also realize my weakness in taking this position. However, in spite of those facts I am spurred on to do my best by the record made by the retiring president. Were it not for the confidence I have in the president who has preceded me and in the Board of Directors and every member of the Association, I would not accept this office under any condition, but I take this office believing that I will have the support of every member of the association. I heard a gentleman say this morning that the goal was 2,000, and we hope next year to be well on the way, and we will be, provided every man does his part. I hope that the good feeling which now exists among all the members of the Association may continue. There seems to be no strife and harmony prevails, which is a condition to be thankful for. I again wish to thank you for this honor that you have bestowed upon me, and I hope by the end of the year I shall have merited it, and, as I said, I will do everything in my power to make good.

The other officers and directors were introduced in turn and each responded briefly with an expression of loyalty to the Association and a willingness to work in its behalf. Adjournment followed.

THE SOCIAL FEATURES

The many ladies in attendance at the convention, and let us record right here in their honor that many of them attended the meetings of the convention, made the social features prominent and interesting. Card parties and bathing parties were held in the hotel parlors and in the lake, respectively, and the banquet on Wednesday evening, which was an innovation this year, was a tremendous success. About 350 covers were laid, and after those places had been filled an extra table was set for late comers. Mr. England acted as toastmaster in his usual happy manner, calling upon Messrs. Bruhaker, Leonard, Goemann and Morgan, who responded briefly, all of them taking the opportunity to congratulate Ex-President McMillen on the success of his administration.

Many favors and souvenirs were distributed, the St. Louis caps leading in popularity.

The reception and dance following the banquet suffered somewhat from the heat, so far as attendance is concerned, but everybody had a good time.

CONSIDERATION OF LAW AND OBJECTIONS WITH REFERENCE TO LOCATION OF ELEVATORS

BY J. L. ROSENBERGER

The Supreme Court of South Dakota says that the complaint in the case of *J. P. Schaller Company vs. Canistota Grain Company*, (141 Northwestern Reporter, 993), alleged that each of the plaintiffs was the owner of an elevator upon a named railway right of way and that the defendant had a lease to certain of the right of way lying between the elevators referred to as belonging to each of the plaintiffs, and that the defendant threatened to, and unless restrained by the judgment of the court would erect upon its leased portion of said right of way an elevator which would be within 100 feet of each of the elevators belonging to the plaintiffs, and in violation of Section 533 of the civil code of the state of South Dakota for 1903. To this was added a prayer for injunctive relief. The defendant interposed a general demurrer to the complaint. Section 533 is as follows: "No elevator, warehouse, flouring mill or manufactory shall be constructed within 100 feet of any existing structure, and shall be at a safe distance from all station buildings, and so as not to conflict with the safe and convenient operation of such railroad."

In affirming an order sustaining the demurrer to the complaint, the court says that the defendant contended (1) that said statute is unconstitutional in that it is an invasion of the defendant's private rights; (2) that notwithstanding the statute the complaint must clearly show that the act threatened would, if carried out, amount in fact to a nuisance; and (3) that the complaint must also show special injury to the plaintiffs. The court is of the opinion that the defendant was right in its third contention. If the statute is within the regulations authorized under the police power of the state, and if facts are alleged bringing the case under Section 2393 of the civil code (assuming, without deciding, that such allegations are necessary), an injunction action will lie. But to bring this relief within the reach of the plaintiffs, they must allege additional facts, showing a special injury to them. However, the complaint in this case wholly failed to allege any facts showing that the plaintiffs would be specially injured. Nor did it follow that the construction of an elevator within 100 feet of their elevators, even if unlawful, would necessarily cause special injury to them.

It was not necessary in determining this case to pass upon the first or second grounds of the defendant's contention. They were closely interwoven. The court does not think that it ought here to pass upon the constitutionality of the act upon the

August 15, 1914.

99

meager showing of facts set forth in the complaint. While this statute is presumptively a valid act, it is possible that as to fireproof structures it might not be. It is at least presumptively so as to frame structures. This question was not argued by the defendant. Because of the meager recital of facts, and because of the absence of a full argument, the court must decline to pass upon this question at this time.

THE NEW HOUSE OF AN OLD FIRM

The elevator recently completed at Fort Scott, Kan., is one of ten houses owned and operated by the Mead Grain Company of that city. It is the only plant of the kind at Fort Scott and enjoys a lucrative trade from the rich wheat and corn country in which it is situated. It has two private spurs, one from the Missouri Pacific Railroad on the west, and on the east side of the house another from the Frisco Line. These facilities give the elevator the utmost advantage in receiving and shipping grain.

The elevator and warehouse occupies a ground space of 30x110 feet, and has a storage capacity of 15,000 bushels. A large business in seeds is done at the plant, a Monitor Seed Cleaner taking care of this output for all kinds of grain.

A large part of the grain received at the elevator

Alfalfa
Alfalfa, the Greatest Source of Wealth for American Farmers, is the Equal of Wheat Bran in Feeding Value—What It Will Do and How to Grow It

By PROFESSOR P. G. HOLDEN *

THE conditions vary widely over the United States, and you know I would not try to go into many of the details with reference to growing alfalfa, but I want to go into some of the important things.

We have put on many campaigns in the United States during the last two or three years. There have been thirty-four, extending from the Inland Empire in the Northwest, all the way across the Mississippi and into the Southwest, over a large section of this great country of ours. The motto, "Alfalfa on Every Farm," expresses exactly the desire I have in my heart, the thing I believe today will do more to make great wealth for the United States than any other thing. I have been greatly interested in developing corn. I wanted people to study their business, to know the things they were doing every day, to realize that brains were as important in raising corn as they were in the business world. The next great step forward for the Corn Belt is to put some of this alfalfa on every farm, and as I go on with a few suggestions I think you will appreciate more and more what I mean. Go where you will throughout this world, wherever "Corn is King," there you find high-priced land and wealthy people. Go

do the little we can. It is wonderful the changes that will be brought about. Some states sowed more acres of alfalfa this year than were in existence before in that state.

As hundreds of years come and go, people will search for every scrap of history about alfalfa, and the things that have helped to make this nation great. And this region is becoming interested, and there are now few people who will argue with me about the growing of alfalfa. They say it is a good thing, "but I don't know much about it, and I thought I would let Bill get started at it." About all the people need is pushing over, and you men can help to push them over. In many ways you can do that, a few words here and there, education, keeping everlastingly at it, and taking an interest in these things, and they will thank you for helping to put this master crop on their farms, because it does some things that nothing else will do.

Coburn says: "If you put alfalfa into a community, you change the complexion of it, it makes a difference morally, a difference intellectually, it is a different business community." And it does, too. I have studied this all over the United States, and I find every place they have alfalfa there you find the highest type of citizenship, for some of these reasons: It excels every other crop, and you will agree with me some time, if you do not now, in yield per acre, and at the same time in the richness of its feeding value, and also as a drought resistant it has no equal. And as a soil builder. I will refer to that later. Its frequent cutting destroys weeds. It balances the corn ration.

Ninety-six per cent of an ear of corn is hydrogen, carbon and oxygen. And what is that? It comes out of the wind and water, and 96 per cent of that ear is wind and water. The business of a farmer is to transform that starch and sugar over into oil or fat, which is wind and water, and then we sell that to the city fellow who has to have something to live on, and when the farmers feeds it, he is putting on his place the other four per cent, all that came out of the soil. It balances the corn ration; that is, the muscle and the bone and the blood and the sinew, while the corn gives the energy and the fat. Some of you may say, "Growing live stock doesn't help us." But you would have no use for hay if you didn't have live stock. Whenever you develop live stock, you have made a place for hay; it leads to live stock farming, and that leads to all the good things you find in civilization, rich farms, good schools, churches, homes and good people, people that are full of energy and enterprise. Live stock farming leads to living on our farm instead of moving into town, and when a farmer moves into town he is a nuisance. He votes against every single improvement. The excuse is that it gives the boys a chance to get an education. Three-fourths of the boys don't amount to as much as if they hadn't gone to town. They get a collar and some cuffs, and the checkered shirt isn't good enough for them, and they get a notion that they want to get away from work. The worst thing in the world to say to the boy is "Go and get an education so you won't have to work as your Pa has had to all his life." He ought to get an education so that he can do more of the common things in life. The boy in the country is not unfortunate. He may have a good education. Let him go through the four years of high school. Our schools in the future are going to begin to teach in terms of the lives of the people, in terms of the life of this boy. He is going to know quack grass, and dodder, and alfalfa and sour soil; he is going to be able to test cow's milk. He will love his work, and we are going to teach him how to do his work, and not how to get away from it.

In Wisconsin, for every acre alfalfa more than doubled in value any other crops. I took Wisconsin because I said I would take the first state the government report opened up to. There is about four times the profit in alfalfa. Alfalfa is rich in digestible protein. Alfalfa and wheat bran are the richest, 11.0 per cent, but alfalfa is much the better. The only mistake we made in the West was that we thought alfalfa was a hay instead of a grain, and we turned the horses loose, and they overate. That is the only time alfalfa ever hurt any animal.

Timothy, 2.08 per cent protein. A lot of people in this state are trying to make milk with timothy hay. There will be a lot of apologies due some of these old cows. I wish some of them could talk and could tell us what they think of some of the fellows that have been feeding them timothy hay. There isn't anything I would rather say to the people of a county then, "Don't buy your protein; grow it." We used to feed about 11,000 head of steers a year, and we were buying bran and cotton seed oil and tankage, and were paying out \$30,000 or \$40,000 for them, and we finally found that we could grow that in the shape of alfalfa for less than \$5 a ton, and when it was grown it was worth as much as a ton of bran; and it enriched our land



THE MEAD GRAIN COMPANY ELEVATOR, FORT SCOTT, KAN.

goes out in the form of feed. This feed is ground in a two pair 9x18 roller chop mill. The equipment for cleaning and handling the grain as it is received is most complete. From the wagon dump a chain conveyor carries the ear corn to the No. 24 Western Over-Discharge Corn Sheller. There are three stands of elevators, one large stand with 7x12-inch cups and two smaller stands with 7x5-inch cups. In the cupola is a 1,000-bushel automatic scale, and a Western Safety Manlift connects that high floor with the basement. A No. 34 Western Gyrating Corn Cleaner, an Avery Automatic Bagger and a Clark's Automatic Power Shovel completes the equipment.

The power is supplied by a 20-horsepower Fairbanks Morse two-phase Induction Motor.

Crop raised in Los Angeles County led all the others in the United States with a value of \$14,720,900. Out of the 2,950 counties, total, this income represents about one-third of 1 per cent of country's agricultural products.

The scope of the elevator business in South Dakota is shown by the recent statement of the State Railroad Commission. There are 1,107 grain elevators which have taken out licenses of which 731 are bonded for grain storage.

The International Institute of Agriculture of Rome, Italy, reports that the Russian winter wheat crop will be about 100.5 per cent of last year, but that other European countries will have a material falling off. Italy's yield being 16 per cent less for wheat and 20.8 per cent less for oats.

*From an address delivered before the National Hay Association, Cedar Point, Ohio, July 15, 1914.

August 15, 1914.

while we were doing it, and we did it with our own labor, and kept our money at home. A great fundamental principle in business is to keep all the money you have, and get all the other fellows' you can. That makes a fellow rich. That is true of a state and a county and an individual farm. Grow the protein; don't buy it.

Alfalfa makes cheap meat. There isn't anything you can buy that you can put in that balances up the corn equal to alfalfa, whether you take it for chickens, for pigs or for dairy cows. In Illinois they took a bunch of cows and divided them up, and put half of them in one lot and half in another, and fed them alike in every respect, except that one bunch had alfalfa and the other bunch had the same number of pounds of bran. The bran bunch were fresh in December, they fell off a little in their milk in the winter, as you would expect. They ran eighteen weeks. At the end of the ninth week they flopped feed on them; the bunch having alfalfa they gave bran to, and the bran bunch got alfalfa. The bunch that had been having the bran, when they changed, went up in their milk for two weeks every day. They increased. Those that had been having the alfalfa, when they gave them the bran, dropped below. During the entire time those animals gave a little more milk and weighed a little more than had the same number of pounds of alfalfa, than the others that were given the bran.

And for pigs! In Iowa they have been feeding the mother pigs on different feeds, to determine what is the best feed for a mother pig, and they haven't found any combination—and they have been working for three years—that produces as good results as alfalfa and corn. The little pigs weigh more and the mother is in better condition. And just corn alone gave the poorest pigs and the mothers were in the poorest condition. There are some people out West who think alfalfa alone will give good results. It won't; it needs corn to balance the ration. The one is as necessary as the other. There is no place you can help people more than in that one thing, to make them know it takes the two together to bring about the best results. Neither will give the best results alone from the standpoint of profit.

Here is an experiment—they feed one set of pigs on corn and alfalfa for 185 days. Then they feed another set of the same age just corn alone, in the dry condition, without buttermilk or slop or pasture, and they weighed 75 pounds as against the other's 185 pounds. Do you people realize that a pig should have hay just as much as an ox. I used to think that all we had to do with pigs was to put corn in them. The most economical pork is made where you are feeding a hog a couple of ears of corn a day and all the alfalfa it wants, or an equal amount of other grain. Do you know, you can't do a thing that is worth more to the average farmer, where they haven't understood the value of it, than to encourage them to try it out, to use alfalfa for the hogs and for pasture, and when they do, it will make wonderful results in their profits.

Alfalfa is a drought resister. I once dug out an alfalfa root. It cost me a lot of money to dig out that root, besides my own labor. It went down so far that we got tired and couldn't get all of it. Alfalfa is a sub-soiler. It is punching the subsoil full of thousands of holes, and it lets the rain in and takes up the moisture, and the humus in those roots makes a sponge to hold the moisture, and it goes down and down, and it gets the potash and the lime and the sulphur, the plant food, way below. We have been farming up on the surface for forty years, but there is another farm down below, which belongs to us. This alfalfa can use it, and it gets hold of those elements and brings them up and stores them in the leaves, and when you turn under those leaves they have the food that is turned under there and which came from down below. When we feed it to the cows, that is not gone. They have made that starch and sugar, wind and water over into butter, and the manure goes back, and we have the same elements going back into the land that come out of it. It also has the power, through these little bunches on the roots—timothy doesn't have it, blue grass doesn't have it, corn doesn't have it—but it has the power, through these little nodules, formed of little organisms on the roots, of taking the nitrogen out of the air, in other words, we are farming a farm above this farm surface, and a farm below, and adding fertility for the other crops. It adds more fertility than any other crop known. It is giving us twice or three times the crop that any other forage crop will give us. It has a tremendous value for building up our soils and gives us one of the greatest crops we can grow while it is doing it. It is like a hired man hiring out to work all summer for us, and then paying us \$35 a month for the privilege.

Let me tell you one or two things in regard to this hay. The first is, as to saving those leaves. In buying your hay, and dealing with alfalfa growers, emphasize the importance of saving the leaves. The farmer often thinks that if he can cut it and get it raked and get it in, that is all that is necessary. There are two or three things about alfalfa that are important. If I take this little bunch of alfalfa, and some day every student will be told to bring a bunch of it to school, and put the stems in one pile and the leaves in another, and find which variety has the most leaves or the most stems, we will find a little bigger pile of stems than of leaves when it comes to weight, but two-

thirds of all the feeding value of the plant is in those leaves. Not only that, but in the leaves is more digestible and more palatable food, and the animal gets more out of it than it does out of this bunch of the stems.

How do you save the leaves? The method we follow, and we have followed it in a number of different states, so we know it will work almost anywhere, is this—it takes quite a while to readjust our methods—I like to cut alfalfa about this time of the day, from about this time on, 3:30 or 4:00 o'clock. Why? The wind and the hot sun have been pumping the water out of it all day. The sun and the wind have been taking the moisture out, and if you analyze it, you will find it has a much less per cent of moisture, especially on a day like this, when it is hot. You have got rid of that moisture, and that is what we are after when we make hay, to get rid of the moisture without losing the leaves. If you wait until morning, it is full of dew, and when it falls it has that dew in it, and it will be noon before the dew is out. But at night the only dew on it is just a little dew on top, and at six o'clock you can't wet your boots going through the hay field because it is all off. You are rid of it. Then as soon as a rake will clean and won't wool up, it should be raked, because the moisture don't leave out of the side of this stem. The purpose of the stem is to keep it in. Then where is it going out? Through the leaves. If you let it lie there and let the sun cook the leaves, you haven't any way of getting the moisture out of the stems, and it is hard to dry alfalfa after you have the leaves dead and dried up, and the moisture still in the stem. You can't put it in a bale or a mow or a stack; you cannot cure it at all. But if you rake that while it is yet fresh, before the leaves come off, and let it cure in the windrow, or, a hundred times better, and you never make a mistake when you cure alfalfa in the haycock. Let it sweat before it goes into the mow or the stack. I don't believe, nine times out of ten is too strong, that hay gets blackened when we try to put it in out of the windrow before it has sweat. That may seem a little bother, but we figure if it would pay to do that with ten acres of alfalfa, it would pay with 100 acres of alfalfa. If a farmer had a thousand bunches of wheat bran out here that he had paid \$20 a ton for, he would take care of it, but with alfalfa, he says: "That is all right; that is only hay. Let her go." But alfalfa is worth just as much or a little more, you will find, all over the United States, than wheat bran. Alfalfa has wheat bran beaten, pound for pound. Now let us not forget that.

If I cut alfalfa from 4:00 o'clock on toward night, it is very green; it isn't in shape to rake. But the next

morning, if I gather it up with my dodder, and then rake it before there is any dew, that is a good thing. When it is green, you know, if any dew comes on this cut down at night, and it is yet green, it isn't dry, and that doesn't hurt it. If you take the leaves off of this alfalfa, and put them in a teacup, and pour hot water on it, it doesn't make tea. But wait until the leaves are dry, and put them in and pour water on them, and you have tea. That is why rain on it after it is dry takes the protein and the aroma and the other material out of it. I like to rake it and put it in a haycock, and then cure it. The first cutting is the only one you will have any bother with.

Just a word about the cutting, and if there is any criticism I would offer of the people of the United States generally more than any other with alfalfa, is that they do not make their first cutting when it ought to be cut. They go out in the morning and look at the clouds, and guess it is going to rain, and then they have corn to cultivate. That is not the place to look. They should look at the top of their shoes, right next to the ground, and when it is ready to cut, cut it. If you can see this alfalfa I have here, you can see a lot of little shoots right here. Those are going to be pretty near to where the mowing machine knives will cut them. When those little shoots begin to start on this alfalfa, that is as much as saying to us that they have quit feeding the upper branches and are sending their strength into the next crop of shoots. The first crop is getting woody, the leaves are turning brown and falling off, getting rusty, and those little shoots grow up, and we cut them, and we have cut two crops of alfalfa and have got only one. Then it has to start in on another crop of buds, and that takes ten days, and blue grass has started, and the sun burns down upon it, and it kills them off sometimes, and it comes up ragged, the second cutting, and you lose both cuttings. It is far better to cut this alfalfa when it should be cut whether you can save it or not. You had better lose one crop than two. And if you cut it right, when you cut it you will have another crop ready to cut. That is more important, in my estimation, than any other one thing that we have had to learn—and we had to learn it after much experience. We couldn't understand it for a long time. Advise the farmer to set his mowing machine as high as he can. Much of this was cut too low down. These little branches start off the sides of the stem, and if you cut it low, you cut a lot of these little shoots. Don't tilt the bar. Keep it level, if you have to put a shoe under the end of it, and that only takes a little time. Cut it high, and when this falls it lets the air under, and it cures better and rakes better.

The Five Per Cent Freight Rate Decision

One-Fourth of Proposed Increase Granted—Many Suggestions Made for Additional Revenue and for Decrease in Expenses—Publicity Methods Criticised.

By FORMAN TYLER

WHILE the railroads and the newspapers favorable to them are somewhat disappointed in the decision of the Interstate Commerce Commission in regard to the application for a 5 per cent increase in rates, the public generally will agree with the decision as a whole, and awakened business will not be handicapped in the slightest because the railroads were granted only one-fourth what they asked.

The term "5 per cent increase" is a misnomer, although the term generally covers the requested increase for long hauls. The request, however, included "a minimum of 5 cents per ton on all commodities moving under rates stated in cents per ton when less than \$1 per ton. As some commodities were rated at 10 cents per ton, the new rate would mean an increase of 50 per cent instead of 5. In fact, all of the heavy freight on short hauls would suffer, as the proposed tariffs on this class would be unjust and discriminatory. This was one of the main objections for the refusal of the request in its entirety. Other objections are that some of the special rates were too high, and again that many schedules have been fixed by the Commission at previous hearings.

While the Commission freely admitted that a greater income was necessary for most of the roads in the Eastern territory, some of the roads, from their own testimony, did not need it and in many cases those that do need it are embarrassed, not because the rates are too low, but because the roads are heavily over-capitalized, or are mismanaged. The public should not be expected to bear the bur-

den of these faults. Again the requested advance in rail-and-lake routes was merely to preserve the existing balance between the lake carriers and the railroads, and not because the rates on these combinations were too low. The railroads absolutely control the lake traffic and make the rates so as to throw a certain percentage of the business to the land carriers, regardless of differences in operating costs. An increase in land rates without a corresponding increase in the water rates would upset this nice balance, but the Commission could not see it that way and refused the increase on lake-and-rail rates except where it was shown that extra terminal service warranted it.

WHAT THE COMMISSION GRANTED

Except in those special cases mentioned above, the rates as proposed were generally allowed in the Central Freight Association Territory. This district includes the Mississippi River on the west as far north as Burlington, the Ohio River on the south, Lake Michigan and Lake Huron ports, and on the east a line including Buffalo, Pittsburgh and Charlestown, W. Va. The increase was denied to the Trunk Line Association Territory and the New England Freight Association Territory, because New England will have special provision for assisting the railroads and because it was found that the Trunk Line Territory did not need an increase.

Instead of the \$50,000,000 additional income, this will give the roads about \$14,000,000. In addition, however, the Commission proposed several ways by which the income could be increased without an additional burden on the general public. It is sug-

August 15, 1914.

gested that a careful investigation be made of the time allowance for loading and unloading carload freight, and that a reasonable charge be made where excess time is consumed. The importance of this suggestion can be appreciated from the records which show that, on the average, freight cars move only three days out of every 30, and that of these three days they are under load only two days. So far as actual transportation is concerned, the equipment of the roads is only 6 2-3 per cent efficient.

It was also suggested that a charge should be made for collecting and delivering freight; storing freight; transporting containers; furnishing and transporting dunnage, preservatives, etc.; furnishing or paying for wharfage and dockage; refrigerator service; loading and unloading carload freight; reconsigning carload freight; and other special services. The Commission is undertaking an independent investigation of switching, lighterage, and storage in the large terminal cities, and also in relation to spotting, trapcar service, loading and unloading, upon which some hearings have already been held but upon which no definite decision has been reached. These will, no doubt, be the subject of a special bulletin at some future date.

PROPOSED ECONOMIES

The Commission pointed out that many economies could be effected without disturbing the service of the roads. An important item is the free transportation of passengers and private cars. In response to inquiry by the Commission, 88 of the 112 roads under investigation reported that in the single month of June, 1913, there were issued passes of single trips to the number of 482,709, representing 88,575,298 passenger miles. On these same roads it was shown that the revenue for private cars handled free during 1913 would, at tariff rates, have amounted to \$644,250.79.

The economy in the use of fuel would result in a material saving, as the fuel cost of the roads under examination is about 250 millions per year. Operating costs in the shops and on the road can be decreased, and, if the laws of the land are observed, a saving in fines will result. Since December, 1909, \$814,135 has been paid out by the roads for fines for rebating.

It is also suggested that idle or unprofitable property belonging to the roads but which is not used directly in transportation or service, should be disposed of as soon as it can be done to advantage. A gentle hint is also advanced as to the possible increased cost of material when bought of companies controlled by officers or directors of the roads. No dishonesty is suggested, but simply a lack of competitive bidding on material which might result in a saving.

A CRITICISM OF PUBLICITY METHODS

The Commission, in its report, took occasion to criticise severely the publicity methods which the railroads used to influence public opinion in their favor. Apparently a concerted effort has been made to make the public believe that the Commission, by holding up the proposed changes in rates, was obstructing the business of the country, and that the general inactivity would be relieved immediately by the increased purchasing power of the roads, and the financial uncertainty be relieved and confidence restored if the rates were raised. This publicity had the immediate effect of making the financial market more stringent, and making the work of the Commission more difficult. The business depression was not caused by the condition of the railroads; the loss of confidence in railroad securities was not because of low rates, but because of the mismanagement of great railroad systems.

On the whole, the decision on this case has been profitable, although its specific benefits have been small. It has cleared the atmosphere and made a way for subsequent readjustment of rates which will undoubtedly be more sweeping in their character than those granted at this time. It has also focussed the attention of the public and of the roads on certain extravagances and wasteful methods in vogue, which will result in remedial measures. Furthermore, all the roads will be so busy taking care of the increasing volume of business that they will not have time to complain.

OUR VISITORS

J. W. McCORD

POOR old Ponce de Leon must have started upon his ill-fated quest of the Fountain of Youth in sheer envy. Undoubtedly he rubbed elbows at one time or another with one of those fortunate beings who never look old, no matter how many winters and summers lie back of them. This thought occurred to us the other day when we saw the ever-youthful secretary of the Ohio Grain Dealers' Association, J. W. McCord. For the first time we understood the feelings of Ponce de Leon and sympathized with his hard luck, being tempted to go in search of the famous Fountain ourselves.

There is no doubt that Mr. McCord could have



E. M. WAYNE

ELECTION day was over and "consternation created chaotic conditions in Congress" as one of the Washington newspapers expressed it. Our old friend "Special Interests" was seen flying up the street to the railroad station after looking up steamship reservations. There had been a landslide in Illinois and a new Congressman, E. M. Wayne, of Delavan, had been chosen to represent his district.

Now, the fame of this man Wayne had been noised abroad to considerable extent. His achievements as president of the Grain Dealers' National Association and also of the Illinois Grain Dealers' Associa-



given a thousand and one pointers to old Ponce about the art of keeping young. We are not going to stop and figure his age, but he is one of the charter members of the Ohio Grain Dealers' Association and that alone qualifies him for membership in the Methuselah Club. Moreover, back in 1899, when the Ohio organization was just beginning to discover that he was indispensable, we read in an issue of the "American Grain Trade" that he celebrated his fiftieth birthday.

It is almost unbelievable and of course rumors are often circulated about the Fountain of Youth which he is supposed to have in his own back yard at Columbus. However, we have discovered the secret and herewith give it to the world as exclusive information. It is a "scoop," none of our contemporaries having the news as yet. If you would live to a ripe old age and continue in the bloom of youth, mix yourself a McCord Elixir consisting of plenty of the spirit of industry, a liberal amount of the seltzer of optimism and a few pieces of ice of common sense, shake well before taking—and there you are!

He has plenty of Scotch reticence combined with Irish candor and although it is easy to get him to talk he steers carefully away from the shoals of personal things. Consequently the announcement of his "Great Secret" will come as a surprise to even his closest friends.

tion were such as could not be hidden, even if his campaign managers had tried, which being human, they never attempted. Consequently at the news that Congress was at last to have one more efficient business man added to the few powerful factors already present, it was no wonder that rampant Republicans, desperate Democrats, pitiless Prohibitionists and scoffing Socialists cried out individually and collectively, "Woe is me."

There was also great excitement among those active in preparing bills. What would become of grain trade legislation? For the first time within the memory of the oldest Congressman there would be someone enrolled who really understood something about the grain trade and would be able to give first-hand information, effectively shelving a lot of theoretical and impractical bills which serve no purpose except to bring their sponsors into the limelight. And the farmers were satisfied. For was not Mr. Wayne, who himself owned a 700-acre farm, capable of looking after their interests?

Just then we awoke from what was really a very pleasant dream. Election day is still some time distant and Mr. Wayne has not yet won his Congressional mantle, although there are great hopes. Aside from all other reasons we join the ranks of his partisans, for the pleasure it will give us in seeing something in the *Congressional Record* which is really interesting and readable.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.**OFFICE:**Manhattan Building, 431 South Dearborn Street
CHICAGO, ILL.

A. J. MITCHELL.....Business Manager

Subscription Price - - - \$1.00 per Year
English and Foreign Subscription - 1.75 "**ADVERTISING.**

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, AUGUST 15, 1914.Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.**AN EXPERIMENT IN EXTENSION**

A report from our northern neighbor gives an outline of a new departure to be put into effect by the Canadian Pacific Railway. Supplementary transportation by motor wagons is to be instituted, which will operate from prairie stations and collect grain from the farms. This will bring the railroad to every farmyard, an excellent system—if it will work. Statistics show that road transportation costs about three times that by rail per ton mile; the equipment, which must be large to do any practical good in moving crops, will be idle most of the year; and during the period of greatest crop movement the heavy snows make transportation by motor extremely uncertain. In short, while the idea appeals to the imagination it fails to commend itself to the judgment.

THE BILL OF LADING

For instance: In a pigeon hole in the desk of Chairman William C. Adamson, of the House Committee on Interstate and Foreign Commerce, lies the Pomerene Bill of Lading Bill, which was passed by the Senate, sent to the House, referred to this committee, and is now sound asleep in the little morgue referred to above. Mr. Adamson has a Bill of Lading Bill of his own, so unless there is great pressure he will not report out the Pomerene Bill. If every member of the grain trade wrote to his congressman at Washington in regard to this Bill, the pressure would begin to show. Under the present practice the railroads have every advantage. The proposed measure gives the shipper a chance. The grain trade constitutes one of the largest shipping interests in the country. They will be greatly benefited if the

Bill is passed. Then write your congressman to get busy. Your letter is just as important as the next man's. Don't leave it for the other fellow. It is volume that counts at Washington.

WAR

The country is war mad. Even baseball is neglected—and that is the last word in preoccupation. The horrors and far-reaching consequences of the situation are on everybody's lips and in every newspaper. We shall not dwell upon them. No interest is more nearly affected than the grain trade, and no one is more helpless. Until the foreign market is again open, neither price nor available domestic supply can be determined, the latter because in war time wheat is the great desideratum, and the demand from abroad may be such that we shall be glad to substitute other cereals or vegetables for bread at the price demanded. In that case the surplus exported will be larger than anticipated. At present the insurance is too great to warrant shipment and even if the risk of confiscation were eliminated the collections are too uncertain for trade. Every influence is being concentrated on devising some means for handling grain paper on an international basis and settlement of this all-important feature is looked for in the near future. The most probable outcome is that the foreign nations which must have our grain at any price will place in our banks gold which will be paid out against export bills of lading. Reports to this end are rife but cannot be depended upon. Until the actual cash is paid over there will be no exports. Whether this will be done in a few days or in many weeks there is no means of telling. In the mean time let us keep our heads and mend our fences at home. There is plenty to do independent of the war and this period of temporary stagnation and uncertainty is the time to do it.

THE MERCHANT MARINE

The European War will correct a situation in respect to American shipping which has been crying loudly for adjustment for years. We have no merchant marine. Under ordinary circumstances this is no disadvantage to commerce as we can export goods as cheaply in foreign bottoms as in our own. The pinch comes in war time when our own navy needs auxiliary vessels, and foreign ships are not available for merchant service. Many attempts have been made to build up the shipping industry by subsidy. Now subsidy is no more nor less than taxing the many for the benefit of the few. It is un-American and unnecessary, and fortunately has been defeated.

The trouble has been that our laws governing the regulation of shipping have been so restrictive as to make competition of American vessels with foreign ships impossible. In our measurement of registered tonnage we include space of engine room, coal bunkers, etc., making it about 30 per cent higher than if measured by European methods. We require officers and men where foreign vessels do not, and some of our shipping treaties are inimical. The law says that no foreign built vessel can be

entered under American registry. This law was the subject of a number of bills in congress to repeal one, H. R. 18202, having gone to joint conference as we go to press. It is a question if the law will be effective, if passed, unless supplementary legislation makes it possible to operate the vessels in foreign competition in times of peace as well as war, for American capital will be reluctant to engage in a large investment which can be profitable only in war. If subsidy is the only alternative, however, we believe the American people would rather do without a merchant marine.

CHICAGO BOARD UPHOLDS TRADITION

On July 30, with a wheat pit delirious, stock exchanges throughout the country closing their doors, and traders not knowing whether they would pass the clearing house on the morrow or not, the directors of the Board of Trade considered for a moment closing the doors to allow a readjustment and a saner outlook. But never in its history had such a thing been done even when other great exchanges had found it necessary, and without argument the tradition was sustained. The grain world was watching and those closed doors would have brought wide disaster, for the next day the market fell there was some recovery of losses.

To their great honor the strong houses in Chicago and elsewhere stepped into the breach and took up trades of weaker firms who were in danger. The situation was without parallel, and the hardest campaigner does not care to see it repeated.

THE BREAD SUPPLY

The world's crop outlook gives a secure feeling to the actual holders of American wheat, in spite of the present difficulties of getting it to foreign markets. France has a crop estimated at 240,000,000 bushels, with much of it unharvested and the fields deserted except for women and children. Last year the requirements were 356,000,000 bushels. Italy's crop is 172,800,000 bushels which is practically made,—but it is nearly 70,000,000 bushels under the requirements of the country. England has 56,000,000 bushels in the new crop. On July 18 there were 1,729,000 bushels of old wheat in store, a bare starter for the great demand. Russia has a crop of about 500,000,000, enough for its own use. The government has forbidden export, however, so whatever surplus it may have will not be available elsewhere. A leading Vienna newspaper of August estimated the crop of Austria-Hungary at 184,000,000 bushels and the actual home requirements under ordinary conditions at 224,000,000. The German crop is above the average, but that country is always a heavy importer of wheat. The Balkan States have a short crop—though probably enough for their immediate needs, and Belgium and Holland depend on the outside world.

To supply this demand United States and Canada will have about 400,000,000 between them to spare. Australia has about 2,000,000 available for export during the next four months, and India and Argentine will have but a comparatively small amount before the next

crop, which is harvested in March and December, respectively, while the Australian harvest is in January.

THE RATE DECISION

The Interstate Commerce Commission has at last handed down its decision on the Five Per Cent Rate Case. The flat increase has been denied. Increases ranging from one to five per cent will be granted in the Central Traffic Association Territory on commodities now transported below cost. In the Eastern and New England Territories increase is denied at this time. This will add \$14,000,000 instead of \$50,000,000 to the income of the roads. The actual relief afforded is not great, but the effect of the decision is far-reaching: First, it has shown the railroads that the public will not be expected to pay the fiddler for the dance of high finance; second, that, although the railroads are privately owned, they belong to the public and must give the public a square deal without discrimination or favor; third, that the days of rapid increment of property values are over, that the extravagant methods of those days are obsolete, and that the railroads must be judged by the same standards of efficiency as other business; and, finally, that the public pays all the bills and under the above program, will get the service it pays for and no more. When the railroads show that they are carrying out in good faith the recommendations of the Commission, it will be up to us to be reasonable about meeting the necessary charges. The future will show what these charges must be.

SKATING ON THIN ICE

The Southern Rice Growers' Association recently sent out a circular letter to all interested in the marketing of rice in this country, giving a warning against foreign competition, and urging co-operation in domestic selling. One paragraph of the letter reads as follows:

We must find the highest price at which we can safely put our rice on the market, and we must then stand together for the price we set. We must not leave the market to chance nor to guesswork.

If this is not stepping over the line set by the Sherman Law it is coming dangerously near it. Farmers have no more right to combine to fix a price for their product than manufacturers have. The members of the Southern Rice Growers' Association control the greater part of the output. As an association they have a monopoly as defined by law, and monopolies are not popular with the government.

A FAR-REACHING DECISION

The United States Supreme Court recently handed down a decision in the Kansas Insurance Rate Case, which may have a revolutionary effect on many industries. By this decision the states are given power to regulate rates of fire insurance. As a basis for this power two conditions were necessary; first, the business must be affected with a public interest; second, the property employed must be denoted to a public use. This considerably broadens the powers of the states whose former limit was reached by the decision in the Munn case,

by which storage elevators are brought under the warehouse law. The universal use and necessity of insurance, which was the chief foundation of the Kansas decision, might likewise be applied in the case of grain, flour, bread, coal and other articles which are universally used and, from this construction, are of public interest. A picture of a state legislature trying to fix the price of grain might be an excellent subject for a moving picture comedy, but as a serious business possibility its humor disappears.

POKING FUN AT THE INTERSTATE COMMERCE COMMISSION

Of course the freight rate decision did not meet with universal approbation and the newspapers especially were almost a unit in their condemnation. Many grain men felt that the decision promulgated did not warrant the long delay and even those who agree with the Commission's finding will appreciate this satiric little fable which the *Public Ledger* (Phila.) printed in a recent issue:

Utopia voted to hire a town dentist as the United States employs the Interstate Commerce Commission. It was this dentist's business to have a monopoly of all surgery pertaining to human teeth. Unless it was proved that this dentist meant to cut off the victim's head, the victim had no appeal. Well, one day a respectable old gentleman had a severe toothache. "I want relief as quickly as possible," exclaimed the sufferer. "Your case requires deep study, therefore, go home and I'll see you three months from today," was the town dentist's ultimatum. The respectable old man couldn't argue, he couldn't consult another dentist and so he went home with the aching molar. Three months later he came back and the dentist began operations. Oh, bless you, no, he didn't look at the tooth. He sent for a lawyer, who had once written a magazine article to the effect that the reason old gentlemen get toothache is because they eat too little mush. The lawyer began to badger the victim and go into his family history for three generations. He insisted upon knowing where he bought his clothes, what house rent he paid, could he speak Russian, what was his religion, did he have any children, how did he spend his vacations? These and 68 other questions required over a year in the answering. At the end of that period the dentist looked at the tooth, but decay had entirely destroyed it. Query: What should the populace do to such a dentist?

UNITED STATES BACKWARD IN SCIENCE

Agricultural Science, which makes for larger and better crops, fills but a small place in this country compared to what is being done elsewhere. Russia has 115 agricultural stations, Germany 81, and France 74. This country has 61 stations, but compared to our area and varieties of climate and soil this number seems ridiculously small compared to Japan's 58, Austria's 40, Sweden's 26, Italy's 25, Hungary's 22 and Belgium's 16. Any one of these countries could be lost in one of our great grain producing states. Our stations are doing practical work and are gathering volumes of valuable data, but the method of spreading the knowledge so gained to the farmers who might profit by it, has been inefficient and wasteful. Private enterprises and the agricultural schools have done more practical good in disseminating information than all the Government agencies. The Crop Improvement Committee of the Council of Grain Exchanges has probably been

instrumental in a more widespread awakening than any other one factor in the movement. Let its work go on with the united support of the grain trade.

ARTICLES OF VALUE

In this issue begins a series of articles on "Elevator Accounting," which are intensely practical and should have the attention of every grain man. In all probability most elevators can adopt many of the suggestions to their own system without much additional outlay for new record books. One of the most valuable points in this first article is the necessity of putting down in black and white every detail of transactions even though under ordinary circumstances they can be carried in mind. It is in the extraordinary circumstances that these details become of value. If they are always put down there will be no trouble. Read these articles and keep the magazines until the series is completed.

FUTURE TRADING CAMPAIGN

Associations have very generally endorsed future trading in grain as a necessary part in the marketing of crops. Most of these resolutions have been sent to representatives in the state and national legislature. There they are read by title and filed with scores of other memorials and forgotten. But when a senator or representative gets personal letters from Thomas, Richard and Henry, protesting against future trading, he sits up and begins to think there must be something wrong with the practice after all, if these men take the trouble to write him about it. The newspapers, particularly in the Northwest where the farmers' elevator companies flourish, have printed columns of communications aimed to discredit the grain exchanges. For the most part these communications are unanswered and thousands of well meaning but shallow thinking people have been influenced to believe that selling grain for future delivery is a menace to the prosperity of the farmers and the eternal salvation of those who practice it. The legitimate grain interests cannot afford to let this fallacy remain, or it will certainly result in inimical legislation. Accumulated sentiment is the greatest force in American politics and this rapidly growing sentiment should have the careful consideration of the trade.

KEEP SCALES IN REPAIR

We can remember the time when there was a good deal of worry and flurry about the necessity for grocers and other small retail dealers keeping their small counter scales in good condition, when no attention was paid to the larger scales at all. Such days have passed, however, and today the wagon and track scales are receiving their proper share of inspection. Several grain associations now have official grain inspectors and we notice that the Illinois Grain Dealers' Association expects to keep two inspectors busy during the coming year. Special scale inspection and service will be rendered to all association members desiring it. This is the kind of work which helps to promote the "Association idea."

August 15, 1914.

EDITORIAL MENTION

Alfalfa is said to be an Arabic word which means "the best fodder." Why Arabic? It means the same thing in United States.

Canada has offered the British Government 1,000,000 bags of flour as a gift. Perhaps England will reciprocate by opening an ocean lane to transport it.

One feature of the crop season that is very pleasing is that despite the bumper wheat crop the railroads appear to be moving the wheat better than ever before.

The Montreal Highlanders have been ordered out to protect the elevators at that port. The harbor is being patroled by a fleet of tugs and the port is virtually closed.

English statisticians continue to be optimistic concerning the food supply of the nation in spite of the small amount in store. If England is fed America will hold the spoon.

In Ontario, Canada, lightning rods have proved to be 94½ per cent efficient. This is so high a percentage that no elevator can afford to be without this inexpensive protection.

War scares and crop scares belong in the same category. When either one materializes into a reality unusual conditions in the selling end of the grain business are experienced.

The North Dakota Grain Storage Act, which compels elevators to accept for storage all grain offered, is not popular among elevator managers, as it forces hedging sales in many cases.

The number of grain and grain elevator fires due to lightning is on the increase according to recent insurance statistics. It would almost seem there is still a demand for the old "lightning rod man."

Many grain shortages have been reported on lake carriers. While some of the grain fleet resemble arks there is no record of there being on board animals which would devour enough grain to account for the shortage.

The province of Alberta, Canada, has tendered a gift of 500,000 bushels of oats, to be delivered at any port on the Atlantic Coast. The total grain surplus of Canada is no doubt destined to be an important factor in the struggle.

The French premier has sent out an official proclamation to the women of the nation, asking them to go into the fields and vineyard and save the harvest. It is refreshing to hear that someone in Europe is intent on saving life instead of taking it.

We have been hearing more about black rust this year than ever before and reports of damage in various districts from this cause have been numerous, although later reports seem to reduce the first figures. But it serves to recall the fact that in the Minnesota and the two

Dakotas, in the year 1905, the loss from black rust amounted to about 30,000,000 bushels of wheat. Fortunately the disease seems to be a sporadic one and proper seed selection and soil cultivation will eliminate it.

Shippers of oats have been warned by South Carolina officials that all shipments into that state must comply with the state feedstuffs law. Several shipments have recently been seized as "misbranded" because of a large percentage of wild barley and weed seeds.

The celebrated corn palace at Mitchell, S. D., which has been described and illustrated more than once in the "American Grain Trade" may be reproduced at the San Francisco Exposition. It is planned to make the South Dakota Building at the Big Fair a replica of the corn palace.

Every grain man ought to have some idea of alfalfa growing as well as alfalfa selling and Prof. Holden's address delivered at the National Hay Convention, and printed on another page of this issue, contains matter which no live dealer should fail to post himself upon.

Michigan dealers please take notice! A new species of bean has been discovered by Prof. H. Pettier of the Panama Department of Agriculture. The new variety is to be named *Goethalsia* in honor of Col. Goethals, and has only about 7,000 little brothers and sisters in the bean family.

About the best definition of the present European war we have seen is that given by *Milling* (Liverpool) which says, "We are fighting we know not why; we shall finish we know not when; we shall fare we know not how." Add to this Sherman's terse and comprehensive statement and we have a pretty good idea of what the conflict means.

The present issue contains the last installment of "The Romance of Grain." It has been running for twenty issues and represents quite a good-sized book as those, who have been following our advice and pasting the installments in a scrap-book, now realize. Moreover it contains invaluable reference matter which can be found nowhere else in such accessible form.

The Etoile, a daily newspaper of Brussels, announces that the Belgian Government has bought the entire wheat supply in Antwerp after announcing to holders that the grain would be confiscated if they failed to agree to the Government's terms. The price paid is not stated, but it is safe to say that Belgian grain dealers are not making fabulous profits this year at least.

Much criticism has annually been directed at the Government free seed distribution and there are few supporters of what has generally come to be regarded as a form of graft. Nevertheless the system of handling, testing and distributing the seeds from a purely mechanical standpoint is a marvel of efficiency as may be gathered from an illustrated feature article on another page of this issue. It is considered prob-

able, moreover, that the future work of the Department will in a great measure concern itself with field seeds rather than vegetable and flower seeds, and especially the development of new seed varieties.

Argentine corn is suffering in transportation to this country because of excessive moisture. The Argentine Government has recently established a grain standardization bureau and installed American moisture testers. This is good for the future of the southern markets, but it won't keep the present crop sweet.

J. C. Mohler, the new secretary of the Kansas Board of Agriculture, began his administration by urging the farmers of the state to adopt diversified farming. It is to be hoped that the advice will be widely adopted, as the unusual crop of volunteer wheat this year may prove the undoing of some who hope for a repetition. Occasionally a volunteer crop will make good. Usually it has about as much chance as a bow-legged girl in the town in which she was raised.

Crop improvement has come to engage a great portion of the grain dealer's attention. The Council of Grain Exchanges, Illinois Grain Dealers' Association and various other grain organizations have taken up the question and are promoting better crops by holding local meetings and circulating literature. To co-operate with this work in the fullest extent, the "American Grain Trade," inaugurates in this issue a Crop Improvement Department wherein the latest news and developments of this important work will always be found.

The problems of grain exporters are, of course, acute at this stage of the European war. In view of the fact that England is said to have only about ten weeks' supply of wheat on hand and the other countries involved have likewise a limited amount, the early establishment of "war risks" wherein the government assumes responsibility for ship and cargo in event of its being sunk or captured by a warship. Such a risk would be feasible in the event of England and its allies obtaining control of the sea as is by no means improbable. The main thing then to worry about would be how long the exporters would have to wait for their money, even though shipments were guaranteed or bought direct by the government in control.

Galveston grain men are expressing resentment in no mild terms over the recent action of the Santa Fe road in placing a ten days' embargo on wheat shipments through the port of Galveston on the grounds that facilities were lacking here for the prompt handling of the grain was entirely unjustified. The elevator and steamship capacities are said to be far in excess of any demand that has so far been made upon them. The Galveston grain elevators at the wharves can keep in storage a total number of 4,250,000 bushels. The average amount taken up in a day from freight cars during the session is 484,000. About 185,000 bushels can be loaded on ships in the same length of time. Accident to the elevators is provided for by a week's storage capacity.

C. D. CARLISLE
Kansas City.C. A. SHOTWELL
Indianapolis.

NEWS OF THE TERMINAL MARKETS

ADOPTS NEW GRADES

All the grain dealers in Mobile, Ala., have adopted the new grain grades of the department of agriculture, according to J. T. Pope, grain inspector of the Mobile Chamber of Commerce.

OFFICE INSPECTION AT MEMPHIS

E. R. Gardner, chief grain inspector for the Memphis Merchants Exchange at Memphis, Tenn., on August 15, discontinued the inspection of grain in railroad yards and supplanted the old system with the more modern office inspection which has proven very popular in Chicago and other markets.

CONSERVATISM NEEDED

Pope & Eckhardt Company of Chicago say in market letter August 7: "We still counsel conservatism in all business, and that risks, even in the way of hedges against actual grain, be restricted to a basis where the trade can be amply protected in any contingency that may again arise."

ELECTION AT LOS ANGELES

At the recent annual meeting on the Los Angeles Grain Exchange, W. E. Howard was elected president to succeed George H. Martin. Two new directors were elected in J. H. Taylor and D. M. Thomson, and old directors who were re-elected were George H. Martin, O. H. Morgan, F. S. Coates, W. B. Waterman.

PORT CLOSED AS WAR MEASURE

The port of Montreal was virtually closed the night of August 3 for the first time in its history. The following day a tug fleet patroled the lower harbor and a force of 200 men was sworn in to exclude all landsmen from the wharves. A number of steamers loaded with grain that should have sailed remained at dock.

CARS CONTAIN MORE GRAIN

It is announced that the Kansas City Board of Trade may make an increase in the average number of bushels of wheat it allows per car in computing receipts of grain at that market. The average since July, 1910, has been 1,200 bushels per car, but it is believed the average is now nearly 1,400 bushels, as grain shippers are loading cars heavier than ever before.

EXCHANGE HOLDS OUTING

The first annual outing of the Los Angeles Grain Exchange, Los Angeles, Cal., was held at Mt. Lowe on the afternoon of August 8. All the members of the exchange were there as well as very many of the grain dealers of Southern California. A banquet was given at Alpine Tavern in the evening. The committee in charge of the affair was D. H. Lillywhite, R. A. George and J. C. Tarr.

A WAGNER WHEAT REVIEW

All markets under war stimulation. Canadian wheat crop guessed low as 160,000,000. North America has 1,070,000,000 wheat versus 970,000,000 last year. The 100,000,000 extra is offset by shortage of 200,000,000 in Russia and small European crops. Long war of over a year would mean fancy wheat prices. Otherwise December wheat at \$1.00 to \$1.10 discounts a 3 to 4-month struggle.

Duration of the war is a vital factor in wheat. If Russia stops exporting for 6 months, America will be the only source of quick large supply, and

the tendency will be higher. Early peace decision would be bearish. Active bulging market indicated.—E. W. Wagner & Co., Chicago, letter August 8.

WALTER FITCH PASSES ON

Everyone heard with profound sorrow of the death of Walter Fitch, head of the firm of Walter Fitch & Co., of the Chicago Board of Trade, which occurred at his mother's home at Eau Claire, Wis., July 17 last. For the most part the notice was unexpected and therefore the more keenly felt by his many friends, for there was probably no man in the grain industry of the East or West who had a more charming personality, who invited warmer friendships, or who had qualities of mind and heart,



THE LATE WALTER FITCH

more worthy of esteem. His death will be a real loss to the entire grain trade.

Walter Fitch was born at Fox Lake, Wis., in 1861, and educated in the public schools of Detroit, Mich. He entered into the grain business at Ashland, Wis., removing to Chicago and joining the Board of Trade in 1898 as a representative of the Northern Grain Company. In 1903 he started the house of Pringle, Fitch & Rankin, which was succeeded a few years later by the present firm. As president of Walter Fitch & Co., he helped establish a commercially sound and lucrative business. Associated with him in this enterprise were Leeds Mitchell, W. K. Mitchell and John Ashum. In 1906 he was elected president of the Chicago Board of Trade but declined a nomination for a second term. He was prominent in Chicago club circles, being a member of the Chicago Athletic, the Union League, South Shore Country Club, and others.

Among Mr. Fitch's special attainments was the gift of oratory and he had presided at some of the principal banquets given by the Chicago Board of Trade, notably that given to the late secretary, George F. Stone, at the Blackstone Hotel, and that given by the Board to the visiting grain dealers and members of exchanges at the La Salle Hotel on the evening of September 17, 1909. On this occasion he was never more fluent, more ready, more dominant over an unruly band of rooters, who, in their

applause, threatened to overwhelm the toastmaster by their noisy good will. It was in his introduction of Speaker Joseph G. Cannon that he made an allusion singularly apt and appropriate. He was telling of the difficulty of securing the Speaker for the occasion, and how, as a member of the committee, he called on Mr. Cannon to present the Board's invitation to address its guests.

"Mr. Cannon hesitated," said Mr. Fitch, "but I caught the Speaker's eye and he yielded gracefully to our request." A smile spread over Mr. Cannon's shrewd face as Mr. Fitch so subtly reminded him of his official place at Washington.

Mr. Fitch's broad heart placed his services before everyone needing them. He seemed to radiate good will, and in his business, home and personal life he will remain an ideal man in the memories of those who knew him.

MARKET COMMENT

"At this time it is impossible to forecast the market future," say Clement, Curtis & Co., in August letter. "Should general war ensue, exports will be largely out of the question until ports of entry are in the possession of one or the other of the two great combinations. During the curtailment of exports there will be a tendency to accumulate wheat at the export and primary markets. There is suggested a large surplus for export on the total indicated yield, even should there be further losses in the spring wheat region the surplus will exceed last year by 100,000,000. With a loss of 150,000,000 in Russian spring wheat, 50,000,000 in Western Canadian crops, the prospect for a good price market of our crops will be excellent should there be a calming down of European belligerency."

"The corn market shows the strength resulting from the losses by drought. The dry area is practically over the same section as last year, less intensive in the Western part, but it extends eastward and includes a larger area than last year, Kentucky and much of the cotton belt being affected this year. An average crop is the best that can be expected, a continuation of last year's market is probable on normal business conditions."

"The oats crop looks like a repetition of last year. The carry over is smaller, the Canadian crop is small, and there will be less available than the season just closing."

CHANGES IN MEMBERSHIPS

Baltimore.—Transferred memberships of the Chamber of Commerce are Walter B. Brooks and James S. Russell. New member: Jno. B. Ramsay.

Chicago.—The Chicago Board of Trade had several changes in membership last month. New members are: Rudolph L. Gunnarson, Wm. S. Mayer, Wm. G. Dilts, Jr., Roy M. Malvin, Robert F. Straub, M. C. Hoiroyd, E. W. Jacobs. Transferred memberships are: Geo. L. Bacon, C. B. Crawford, Walter C. Feagle, Henry Stemper, A. H. Bliss, Charles R. Leahy, Wm. H. Ferguson.

Duluth.—Five new members have been elected to the Board of Trade. They are: E. J. Maney, S. S. Turney, George F. Foster, H. W. Hellier, E. H. Pugh. The transferred members are: John A. Savage, H. D. McCord, H. S. Hakinson, John A. Lamb, Frank J. Seidl.

Milwaukee.—New members admitted to the Chamber of Commerce are: Edward J. Grimes, Austen S. Cargill, Andrew L. Jacobs, H. Clay Shaw. Memberships transferred are: Benjamin S. Wilson, R. W. McKinnon, Estate of Wm. P. Jochem.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

St. Louis.—New members admitted to the Merchants Exchange are: Harry S. Newman, M. A. Bright, H. L. Nickel, Culver L. Hastedt, Milton E. Veninga, M. A. Bright and Company, J. B. Taylor Grain Company, G. A. Veninga and Company. Memberships transferred are: M. W. Cochrane, Harry Temple, W. A. S. Parkhurst, Wm. T. Richardson, W. H. Oberbeck.

NEW YORK OATS MARKET

L. W. Forbell & Co., New York City, say of oats August 8: "Local conditions have been unsatisfactory because of the money stringency and the indifference of dealers to the advance. Consumption has decreased by reason of a slowing down in all lines of business, but enhancement of values should have a tendency to revive the demand."

NEW OFFICERS RICHMOND GRAIN EXCHANGE

At an election held the latter part of July the following officers and directors were chosen to serve on the Richmond Grain Exchange:

President, R. L. Chenery; vice-president, Geo. D. Mayo.

Board of Directors, W. F. Richardson, Jr., J. E. Cox, Jr., W. T. Selden, A. C. Diggs, R. S. Christian, T. G. Williamson, W. G. Bragg, W. E. Todd, H. G. Carter.

FIGHTERS MUST ALSO EAT

"All nations involved in the present conflict import wheat except Russia," say C. A. King & Company of Toledo. "European wheat crop is short. Germany and England have good crops. France, Austria-Hungary, Italy and Russia are short. Spain and the Balkan States are also shy. Russia has smaller surplus than usual and may put the ban on that. The importing nations can probably go several months on their 1914 crops and present stocks. United Kingdom is an exception as she imports over two hundred millions a year and raises only sixty millions."

ADOPTS NEW GRAIN WEIGHING METHOD

On August 1 the Galveston Cotton Exchange and Board of Trade of Galveston, Tex., put into effect a system of weighing grain moving through the port, both for export and import business, that follows along the same lines so successfully practiced at Kansas City and Chicago.

All grain arriving and departing is officially weighed by the representatives of the exchange and certificates issued which can become official parts of bills of lading or other documents necessary to the marketing and financing of the crops through Galveston.

FOREIGNERS WILL WANT OUR WHEAT

It is a most fortunate circumstance that this wonderful wheat crop comes to this country this particular year 1914. Every grain of it will be urgently needed to help out the deficiency existing throughout the outside world. The magnificent quality of the winter wheat is also a great factor. Such an uniformly excellent lot of wheat has seldom been seen. Snow's August 1st estimate indicates a total wheat crop of 942,000,000 bushels. His figures are nearly always very close to those of the Government. Prices during the past week have fluctuated in a tremendous way, not to be wondered at when the events of the week abroad are considered. The undertone is very strong. Values seem very reasonable in view of the foreign outlook. Conservatism must be the watchword, however, in all trading in futures during these exciting times.—T. A. Grier & Co., Peoria, August letter.

A new grain firm to be known as the T. W. Busby Grain Company has been organized at Oakesdale, Wash. It will be managed by T. W. Busby, who for several years was the local buyer for the Kerr-Gifford Grain Company. The company will operate the following six warehouses in Oakesdale and vicinity: Kerr-Gifford and Pacific Coast in Oakesdale; Kerr-Gifford houses in Warner, Seltice and Farmington, and Hayfield Brothers' warehouse at Hayfield Siding.

TERMINAL NOTES

The Johnson-Olson Grain Company of Minneapolis, Minn., has closed its Duluth office.

Edward H. Pugh has secured an interest in the North Dakota Grain Company of Duluth, Minn.

The Graham & Martin Grain Company of St. Louis, Mo., has increased its capital stock from \$15,000 to \$50,000.

F. D. Gill, formerly associated with Hallet & Carey Company of Minneapolis, Minn., has joined himself with E. L. Welch & Company.

The Hales Elevator Company has been incorporated at Chicago with a capital stock of \$150,000 by Earl C. Hales, William S. Hales and C. W. Hohenadel.

William H. Gallagher, for a number of years salesman "on 'Change" for Knight & McDougal of Chicago, has engaged in the brokerage business on his own account.

C. H. Squires & Sons Company, grain and hay firm on the Philadelphia Commercial Exchange, was posted recently as being unable to meet their financial obligations.

The Board of Managers of the New York Produce Exchange has elected former President E. R. Carthart as treasurer of the Exchange, succeeding the late Edward C. Rice.

The Chicago and Minneapolis Boards of Trade, with all other exchanges, closed at 1 o'clock p. m., August 10, out of respect to the memory of Mrs. Woodrow Wilson, wife of the President of the United States.

R. N. Hoople of the Cargill Elevator Company of Minneapolis, Minn., was one of the passengers voyaging through Yellowstone Park who were held up in a spectacular raid by bandits recently.

The Union Hay & Grain Company of Cincinnati, Ohio, has completed a sacking house having a capacity of 12,000 bushels. It is equipped with an automatic bagging scale and a portable elevator for handling hay.

Articles of incorporation have been taken out by A. C. Davis Grain Company of Kansas City, Mo. The capital stock is \$20,000 and the incorporators are A. C. Davis, W. G. Hoover and H. J. Dissenbaugh.

The Dodge Elevator Company has been incorporated at Minneapolis, Minn., with capital stock of \$100,000. The officers are Robert G. Dodge, president and treasurer; Chas. M. Case, vice-president; L. K. Eaton, secretary.

J. S. Brown has been appointed by the Board of Directors manager of the Transportation Department of the Chicago Board of Trade. Mr. Brown was, until recently, general freight agent of the Illinois Central Railroad.

The Flanley Grain Company of Sioux City, Iowa, has filed articles of incorporation to do a general grain business with a capital stock of \$50,000. The incorporators are Charles C. Flanley, Charles W. Adams, Theodore W. Peterson.

The Hancock Grain Company of Philadelphia, Pa., is now represented on the New York Produce Exchange by L. C. Isbister. The company's former representative, H. R. Procter, has gone with the Brainard Commission Company.

Henry D. Sturtevant, well known as a partner in the grain and stock firm of Shearson, Hammill & Company of Chicago and New York, and manager of the Chicago branch of the firm for the past ten years, has withdrawn from the firm.

The Norris Commission Company, Ltd., has been established to do an elevator and warehouse business at Winnipeg, Man. The capital stock is \$100,000 and the directors are C. C. Fields, C. R. Wilkins, E. L. Conley, W. C. Hamilton, B. W. Thompson.

A. F. Leonhardt, one of the larger grain merchants of New Orleans, La., and who has been postmaster of that city since October 1, 1911, has resigned this office and will devote his entire time to his grain business. As the head of the firm of A. F. Leonhardt & Company, Mr. Leonhardt is known as one of the most active and progressive grain men

of that section of country and it is stated that his administration of the affairs of the post office has been most satisfactory.

The Abbey Grain Company has been incorporated at Minneapolis, Minn., to carry on a general grain commission business. The capital stock is \$50,000 and the incorporators are Lee M. Abbey, Alice V. Abbey and Fred M. Schmitt.

The Cargill Elevator Company has transferred its property on the west side of the river at Green Bay, Wis., to the Cargill Grain Company. The transfers cover the property in De Pere and the warehouse and flour and feed warehouses in the city of Green Bay.

No change will be made in the firm of Walter Fitch & Company of Chicago on account of the recent death of the senior member of the firm, Walter Fitch. The business is continued under the same name by the surviving partners, Leeds Mitchell, W. K. Mitchell and John H. Ashum.

Fred Jaeger of J. F. Zahm & Co. and Charles Burge of S. W. Flower & Co., of Toledo, Ohio, arrived home with their families on the *Lusitania* early in August after a three months' trip to the Continent. They left Europe practically before the war troubles commenced.

Noyes & Jackson of Chicago, a grain and stock firm, members of the Chicago Board of Trade and New York Stock Exchange, have established a cash grain department in connection with their commission business. This department includes both the receiving and shipping of grain and is in charge of F. M. Price.

W. J. Armstrong, head of the hay and grain firm of W. J. Armstrong Company of Milwaukee, Wis., had made plans to sail from Quebec on August 6 on a four months' trip to Europe but postponed his visit owing to the war situation. Instead, he will make a trip to Nova Scotia, Newfoundland and surrounding islands.

The C. H. Albers Commission Company of St. Louis, Mo., of which Edward M. Flesh is president, has increased its capital stock from \$50,000 to \$150,000. The company operates the Venice and Advance elevators in St. Louis and the increase in capital stock, it is stated, was made necessary by their steadily increasing business.

Louis Mueller, of the Mueller Grain Company of Peoria, Ill., has filed his petition for the republican nomination for senatorial committeeman. Mr. Mueller has been associated prominently as a grain man with the affairs of the Board of Trade of Peoria for very many years and is known as a man of sterling worth and staunch character.

H. T. McCord, president of the Merchants' Elevator Company of Minneapolis, Minn., passed through Chicago, August 10, on his way home from the Continent. He was in Paris when the war scare broke out and was among numbers of Americans who crossed the channel to England under the greatest discomforts and difficulties.

Henry Rang & Co., a grain receiving firm on the Chicago Board of Trade, has established a branch office at Milwaukee, Wis., in charge of B. G. Ellsworth. Mr. Ellsworth has been a member of the Milwaukee Chamber of Commerce for many years, all of which time he has been prominently identified with the grain trade of that market.

Bert Boyd, grain commission merchant on the Indianapolis Board of Trade, has sent out a card to his friends bearing the dates, 1885-July 24, 1914, twenty-nine consecutive years with the Indianapolis Board of Trade. There is also an excellent picture of the Board of Trade Building, the Government Building adjoining, and the Soldiers' and Sailors' Monument, one-half block away.

Announcement has been made that on and after August 15, 1914, the Anchor Grain Company and the P. B. Mann Company, both of Minneapolis, Minn., will be consolidated under the name of the P. B. Mann-Anchor Company. The business of the corporations thus merged will be continued by the new company under the same management as before the consolidation, and will consist in handling

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

107

consignments of cash grain, taking care of grain hedges and orders in futures.

The Milwaukee Feed Dealers' Association of Milwaukee, Wis., held a monster picnic at Wolf's Island on Sunday, August 16. A. J. Kneisler, vice-president of W. J. Armstrong Company, was chairman of the picnic committee and did much effective work to make it a success.

The Manitoba Grain Growers' Grain Company of Winnipeg, Man., has secured a further lease on the Manitoba government elevator system on practically the same lines as before. The government turned down a number of offers from United States elevator companies. The grain growers pay 6 per cent upon a capital investment of \$1,100,000. The rentals for 179 elevators amount to about \$60,000.

RECEIPTS AND SHIPMENTS

The following reports are made direct to the "American Grain Trade" from the leading terminal markets, covering the July, 1914, receipts of grain, hay and seeds:

BALTIMORE.—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	3,864,828	2,065,310	1,339,211
Corn, bus.....	257,005	205,408	47,566
Oats, bus.....	345,301	269,289	39,331
Barley, bus.....	708	.....	43,675
Rye, bus.....	70,431	113,570	71,723
Hay, tons.....	3,067	3,435	695
Flour, bbls.....	120,848	109,029	94,400

BUFFALO.—Reported by F. E. Pond, secretary of the Corn Exchange:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	8,608,266	7,692,746	.....
Corn, bus.....	1,712,550	4,267,733	.....
Oats, bus.....	986,991	2,377,864	.....
Barley, bus.....	458,855	1,664,141	.....
Rye, bus.....	188,702	119,558	.....
Flour, bbls.....	962,700	1,131,135	.....

CHICAGO.—Reported by J. C. F. Merrill, secretary of the Board of Trade:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	21,094,000	10,023,000	14,175,000
Corn, bus.....	5,131,000	6,379,000	4,188,000
Oats, bus.....	10,623,000	10,005,000	9,088,000
Barley, bus.....	753,000	1,956,000	206,000
Rye, bus.....	144,000	186,000	53,000
Timothy seed, lbs.	2,410,000	2,647,000	2,529,000
Clover seed, lbs..	429,000	41,000	381,000
Oth. grass sd., lbs.	767,000	632,000	906,000
Flax seed, bus....	24,000	155,000	778,000
Broom corn, lbs....	912,000	899,000	1,128,000
Hay, tons.....	15,927	16,931	2,292
Flour, bbls.....	565,000	894,000	519,000

CINCINNATI.—Reported by W. C. Culkins, supt. of the Chamber of Commerce:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	846,069	327,087	370,324
Corn, bus.....	602,830	478,920	439,058
Oats, bus.....	559,999	591,984	342,274
Barley, bus.....	4,200	8,200	23
Rye, bus.....	36,435	26,537	5,173
Timothy seed, lbs.	4,419	2,663	3,417
Clover seed, lbs..	831	662	1,595
Oth. grass sd., lbs.	9,076	9,801	5,126
Flax seed, bus....	36	8	9
Broom corn, lbs....	25,440	79,514	27,578
Hay, tons.....	12,334	9,804	10,606
Flour, bbls.....	117,098	105,891	74,314

CLEVELAND.—Reported by M. A. Havens, secretary of the Chamber of Commerce:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	208,815	.....	28,320
Corn, bus.....	84,509	.....	77,185
Oats, bus.....	284,697	.....	72,274
Barley, bus.....	1,200	.....	4,789
Rye, bus.....	7,837	.....	24,529
Hay, tons.....	2,471	.....	185
Flour, bbls.....	49,196	.....	16,461

DETROIT.—Reported by M. S. Donovan, secretary of the Board of Trade:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	301,000	96,000	21,000
Corn, bus.....	139,000	57,600	27,000
Oats, bus.....	302,000	300,500	25,000
Barley, bus.....	1,000	7,000	.....
Rye, bus.....	9,000	8,000	1,000
Flour, bbls.....	42,040	29,200	45,400

DULUTH.—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	3,067,749	3,269,455	3,745,138
Corn, bus.....	23,987	226,659	143,950
Oats, bus.....	241,952	2,619,686	489,997
Barley, bus.....	476,281	1,370,537	566,104
Rye, bus.....	127,679	143,146	159,855
Flax seed, bus....	593,206	1,758,000	208,730
Flour, bbls, prod.	80,990	86,473	2,693,791

INDIANAPOLIS.—Reported by Wm. H. Howard, secretary of the Board of Trade:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	1,812,600	1,000,000	258,000
Corn, bus.....	881,000	710,000	222,000
Oats, bus.....	716,000	300,000	140,000
Rye, bus.....	9,000	2,000	55,000

OMAHA.—Reported by F. P. Manchester, secretary of the Grain Exchange:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	2,625,600	4,095,600	1,615,200
Corn, bus.....	1,580,400	1,710,000	2,131,800
Oats, bus.....	1,215,500	712,300	1,300,500
Barley, bus.....	9,800	4,200	1,000
Rye, bus.....	9,900	20,900	33,000

KANSAS CITY.—Reported by E. D. Bigelow, secretary of the Board of Trade:

	Receipts	Shipments	
Articles.	1914.	1913.	1914.
Wheat, bus.....	9,253,200	10,006,800	3,088,800

August 15, 1914.

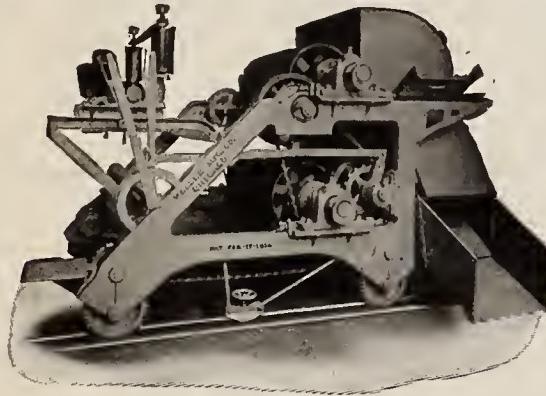
& Hanslow will save \$1.15 per \$100 on \$4,500 of insurance carried, and the \$15 boiler insurance. Additional to this, engineer's time can be devoted almost wholly to other work. Messrs. Sherwood & Hanslow are to be congratulated."

"Longer service" practically spells economy and sometimes it spells wonder. It is said that the grain elevators of the Glove Elevator Company of Superior, Wis., and Minneapolis, Minn., each of 3,000,000 bushels capacity, were painted with Dixon's Silica-Graphite Paint in 1900, and that they did not need repainting until 1913, a protective service of 13 years of which the Joseph Dixon Crucible Company, Jersey City, N. J., is duly proud. Mr. A. L. Searle is the able vice-president of the Globe Elevator Company.

SAVING THE BELTS

For a conveyor belt to be caught in the propelling frictions of the tripper is a serious and expensive accident, yet many elevator operators have had the experience. The belts are generally so badly damaged in an accident of this kind that a new belt is needed or at least a part of one. At times the accident is not so serious, and the belt rips or becomes frayed on the edge for a considerable distance, causing undue wear; and the loose, raw edge is dangerous to employes and to the equipment.

These conveyor belts cost from \$500 to \$3,500 and when run at a speed of from 600 to 1,000 feet per



THE WELLER BELT TRIPPER

minute, a slight unevenness in loading or some other trivial cause may swing the belt back and forth from three to six inches out of center. Some allowance is made for the swing of the belt in practically every tripper; the danger of catching in these frictions has long been recognized. However, this only allows the belt about three and one-half inches to play either way from the center of the pulley, and because of the manner in which these trippers are built, and of clearances demanded, it is practically impossible to give any more space. The tripper illustrated herewith allows the belt to swing approximately six inches out of center, being built on somewhat different lines. It is impossible for the belt to catch in the frictions of this tripper.

The pulleys and shafts are both larger in diameter than is usual with belt trippers offered for the same service.

There are two paper frictions used in this outfit, both of them somewhat smaller than the pulleys, arranged to engage the movable iron frictions at such a point that the belt cannot engage or rub either of the frictions. These trippers have been thoroughly tested out during the past few years in the big Terminal Elevators of Canada and at the head of the lakes. They have so thoroughly overcome the troubles mentioned that a number of houses have changed over from the old style tripper to this style, as a matter of safety and a saving to belts. These trippers are made by the Weller Manufacturing Company, of Chicago.

A new wheat with five parents and inheriting the virtues of each of them is the latest triumph of Professor Rowland Biffen of Cambridge University, England. It is a peculiarly hardy development, growing from three to three and one-half feet in height, stout of straw and also good for milling. This new wheat will be put on the market next year.

WHEAT PRIZE SELECTION DAY

Through organized community work, grain dealers can increase their business 10 per cent. This is not an idle statement but has been demonstrated. To organize a community sounds like a big job, but it isn't. It costs no money, requires no experience, takes very little time, and you, Mr. Grain Dealer, by starting the thing off, will get some free advertising and a personal boost that will come back to you in real money. This is true in practically every locality.

Winter wheat planting will soon be under way. You know that in your community there are a number of varieties of winter wheat which, of necessity, become mixed in the elevator. The milling characteristics of these wheats are so different that the mixture is hard to handle and commands a price much lower than that of a good unmixed wheat. The growers and the shippers would benefit if each community would select the best wheat and all raise the same kind. Here is the way to go about it:

Ask one good farmer in each neighborhood to get a bushel of wheat from each of the best fields in his district, and bring them to a prize wheat conference. If there is a local farmers' club, have it under their auspices; if not, the bankers, merchants and progressive farmers will co-operate.

Secure a competent judge or appoint a committee of three; the miller, the elevator buyer, and a farmer makes a good combination. This committee will select the best type of wheat for the county according to—

Variety.

Size and condition of grains and weight of measured bushel.

Germination.

Number of days from planting to harvest.

Yield per acre.

Milling characteristics.

Market value.

The State Agricultural College should advise the committee and verify the type selected.

This judging of type should be given the widest possible advertising in the local paper, and you can be sure that the editor will co-operate to the fullest extent. Each sample should be tested for germination. Where the schools are not in session, this will have to be done by the committee or by you, Mr. Dealer.

THE PRIZE AWARD DAY

Have a Prize Award Day at the Grange hall or other convenient place. Invite everybody. Have simple refreshments; the girls will provide sandwiches, coffee and doughnuts; and perhaps the men will give 10 cents apiece to cover incidental expenses. All the wheat samples will be exhibited, a prize of \$5 given for the best bushel, and a program should be arranged. As good speakers as possible should be secured and actual demonstrations made on the platform of fanning and grading, results of germination tests, formaldehyde treatment, etc. The following program has been suggested as especially adapted to this kind of a meeting:

1. The advantages of growing a single type and variety of wheat in a community.
2. Early plowing and the preparation of the seed bed.
3. Value of fanning and grading seed wheat. (Demonstration.)
4. The germination and strength of plants with special reference to the size and weight of berries. (Demonstration.)
5. The formaldehyde treatment for smut. (Demonstration.)
6. Combating Hessian fly, chinch bugs and other insect pests.

A full and free discussion of this program should be held and the variety of grain or wheat it is desired to grow, agreed upon. Plans must also be laid for securing enough seed of this variety. The chances are good, however, that it can be found in the community. Seed locally grown is to be preferred if it can possibly be secured.

WHEAT AGREEMENT

It will also be advisable for those attending the meeting to sign an agreement somewhat as follows:

Whereas, the wheat growers in the winter wheat belt are growing a number of different types of hard and soft wheats, and

Whereas, owing to the fact that many farmers are importing seed wheat from other states or obtaining mixed seed from various sources for home planting, and

Whereas, this practice greatly affects the quality, yield and price of the crop,

Now, therefore, in order that all of the wheat growers in this community may grow a single variety of grain best adapted to this soil and climate, free from mixture,

We, the undersigned, (county) ————— (state) ————— hereby agree to co-operate with one another in growing ————— (name) ————— variety of wheat.

To keep this grain pure and unmixed and when harvested, to demand a graduated price at the elevator, according to the quality of the grain delivered.

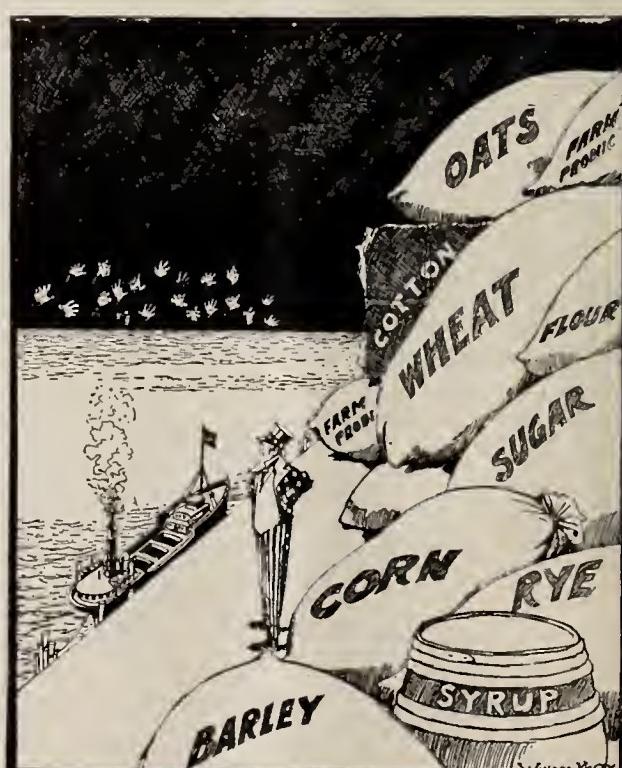
That we will do everything in our power to induce every farmer in this community to raise the same variety so that eventually all wheat shipped from this station will be uniform and free from mixture.

THE SOCIAL SIDE

After the agreement has been signed by all the growers who will adopt it, the refreshments should be served and then, if time permits, a social session will follow; music, games and dancing.

The whole expense of such a meeting need not be more than \$5 to \$10, and less than that if the prizes are donated.

If a "Community Betterment Club" is not in existence, it should be organized at this meeting and the program for the next meeting should be announced.



From The Chicago Examiner

MILLIONS IN CROPS BUT NO SHIPS TO MARKET THEM

August 15, 1914.

109

NEWS LETTERS

[Special Correspondence]

KANSAS CITY

BY B. S. BROWN.

It all depends on the export situation—this is the note sounded in Kansas City this week. Developments any day may change sentiment radically to either optimism or pessimism. At this writing, the consensus is that there will be a heavy demand from abroad, which the warring nations will find some method of meeting through American sources. Kansas City's outlet through the Southern ports was checked by congestion even before the war began, and now all those ports are under embargo. Wheat is being shipped East in large volume, but that outlet is considered only temporary—unless the powers recognize shipments of wheat, flour and other foodstuffs as not contraband of war. Kansas City has immense storage capacity, and the large receipts are being cared for. But while trading in cash wheat has continued uninterrupted except for a holiday for a local primary election on Tuesday, nobody knows how much longer the favorable conditions can exist, even before the storage capacity is filled. The banks have stood by the grain trade, and the arrival this week of the \$1,800,000 from Washington for the seasonable financial assistance of the district, will help stall off any difficulty.

Fortunately, there was a strong tendency among farmers to hold grain; this feature, with the additional factor that several inland mills and elevators are actually refusing to buy wheat, will assist in preventing serious price declines and congestion as a result of the enormous crop and the impossibility of immediate disposition through foreign trade.

The gravity of the present situation, which surely must be relieved because whole nations are seeking a solution of the problem, is illustrated in the case of two large exporting firms at Kansas City. They have \$11,000,000 tied up in wheat at Southern ports. If this wheat and other such consignments cannot be transported to its destination under sufficient guarantees of safety and satisfactory payment, it is possible that the railroads will be appealed to for a special rate under which it can be shipped back to Kansas City or sent to other points for sale or storage. Some method will doubtless be evolved by which the holders can get money with which to help handle the Western crop.

* * *

A charter was granted in July to the Emporia Elevator & Feeding Company, of Emporia, Kan.

* * *

A total loss of \$6,000, including 1,000 bushels of wheat, with only \$4,000 insurance, was sustained July 5 by the Grantville, Kan., elevator.

* * *

The Kansas Flour Mills Company, which several years ago withdrew its elevators as public warehouses in order to avoid double inspection by Kansas and by the Kansas City Board of Trade, has qualified its 100 elevators as public warehouses by the filing of a bond for \$100,000 with the Secretary of State of Kansas. The company has recently purchased the Goodlander Milling Company of Fort Scott, Kan., and the plant will be overhauled, and operated as the Goodlander Mills of the Kansas Flour Mills Company. Peter Dalrymple, manager and majority stockholder of the Goodlander Company, was paid with stock of the purchasing company, while the heirs of Alex. McDonald, who died in June, sold outright. The Kansas Flour Mills Company now has eight mills, at Kansas City, Kingman, Great Bend, Anthony, Pratt, Enterprise and Fort Scott, in Kansas, and at Cherokee, Okla. The semi-annual meeting was held at Wichita, July 8, and a favorable report was made.

* * *

E. W. Woods of O'Fallon, Mo., has purchased the feed and grain business of the Norris Hay & Grain Co. at Columbia, Mo., and will take possession October 1. F. C. Norris of the Norris Company will still be connected with the business.

* * *

A German who has traveled through the Southwest for a Hamburg seed house, Theodore Rimpau, has been recalled to his native country, and will probably enter the service for the war.

* * *

The Kaw Elevator, in the east bottoms of Kansas City, burned July 12, with a loss of \$20,000, including 5,000 bushels of old wheat. The Chicago

& Alton will replace it with a fireproof building of at least 250,000 bushels' capacity, of concrete construction.

* * *

Eastern and Southern railroads had "flooded" the West with their agents late in July, seeking wheat freight business. But they had not been in the field long when the war developments rather minimized their usefulness.

* * *

Theodore E. Cunningham of Chicago, purchased, the last week in July, for \$3,000 exclusive of the \$500 transfer fee, the membership of John D. Seitz on the Kansas City Board of Trade. Mr. Seitz has moved to California. The last previous sale, January 1, was at \$950.

* * *

Reports from Southern Kansas and Oklahoma are that wheat will probably be fed liberally this year to live stock. The pasturing of wheat fields was an important aid to cattlemen last winter, and the grain itself will now become a factor in view of the present premium of corn over the bread cereal. Some wheat feeding has already been done.

* * *

July brought to the Kansas City market the largest receipts of wheat for any month in its history. There were 8,339 cars, against 834 cars in June, and 7,711 cars in July, 1913. Stocks of wheat in Kansas City elevators August 1 were 2,627,372 bushels, against 3,842,345 the same time a year ago.

(Special Correspondence.)

PHILADELPHIA

BY E. R. SIEWERS.

Putting it very mildly, since the war among the great nations of Europe began, the grain export trade from this port has been effectually paralyzed and the absolute lack of ocean-going steamships and all necessary shipping facilities has placed the strictest kind of an embargo on fully fifty million bushels of grain already under contract at this and other North Atlantic ports, and the only business that is now being transacted here is for local and nearby needs, and even that is not of very large proportions.

As the leading grain brokers seem to be in imminent danger of sustaining a tremendous general combined loss, as the situation now seems to indicate, the words are in every leading grain man's mouth, "How will this immense grain tonnage be able to safely reach the other side of the ocean if the war continues?" as England and the United Kingdom have "declared" with no uncertain sound. This has destroyed the last hope of the grain men who were firmly building their plans for exporting grain, in the ships and through the extensive business channels of England, which, they believed, would remain neutral to the end and join hands with the United States, through the London Corn Association, which controls much of the foreign trade, in a satisfactory distribution of America's phenomenal grain yield. It goes without saying that if the grain already contracted for, both here and elsewhere, fails in its foreign delivery, the actual loss to the exporters will easily foot up millions of dollars.

At all of the grain elevators throughout the city millions of bushels of grain are stored, which by this time should be well under way across the Atlantic Ocean. There is plenty of grain here to sell, and Europe wants it. But the exporters on this side of the water are unable to make the deliveries, and that is the serious unsolved problem. As a final climax the war risk insurance rates are now actually prohibitive, ranging anywhere from 5 to 30 per cent. There are twenty-one ships tied up at the grain elevators, piers and wharves here, nine of which are British, seven Norwegian, two Danish, one Austrian, one German and one Dutch; with thirty-three vessels bound for Philadelphia from foreign ports, and, as the stranded vessel in mid ocean, when the cry went up, "Water, water, everywhere but not a drop to drink," so could it be truly said "There's heaps of the golden grain here and everywhere but not a solitary bushel at present can be delivered for export."

* * *

Emil P. Albrecht, secretary of the Bourse, after an extended trip abroad, managed to get back home again just about the time the general embargo was placed on a number of the big steamships after the opening of the war between Germany and Austria, which has since drawn into the game of battle all of the leading foreign countries and military pow-

ers. He says he always believed in the old adage, "It is better to be born lucky than rich."

* * *

The first car of new oats that reached here came in from Indiana and was graded by Chief Grain Inspector Foering as "standard," and was taken in charge by Director E. M. Price of the Commercial Exchange, who is the all around manager for the S. D. Hunsberger estate, elevator and warehouse, for grain, feed and hay at North American Street.

* * *

Russian Vice Consul William R. Tucker is just at present much sought after as the shrewd home diplomat whom the Czar has knighted and bestowed all the grand double black eagle medals upon from time to time. His headquarters are on the second floor of the Bourse Building, where for a number of years he has been secretary of both the Philadelphia and the National Board of Trade.

* * *

Treasurer Joseph W. Beatty of the Commercial Exchange, who has been confined for several months to his West Philadelphia home with serious illness, up to this period shows very little signs of improvement.

* * *

Secretary Marshall of the North American Export Association stated that the shippers here insist that all grain transactions must be in cash and the money placed in the foreign banks before the cargoes go forward.

* * *

President J. W. S. Holton of the Maritime Exchange is "bottled up" at one of the famous watering places in Germany, having arranged upon his arrival abroad for an automobile trip to the principal cities of continental Europe in company with his wife.

* * *

At a meeting of the grain trade held on the floor of the Exchange the following resolution was unanimously adopted, mid a loud hurrah on the part of the grain men:

"It is the sense of this meeting that no demands against existing freight contracts for the loading of commodities at the Atlantic, or Canadian or Gulf ports shall be recognized, until such time as bankers engaged in the handling of foreign exchange in the United States and Canada shall recognize documents signed by the steamship companies as sufficient guarantee upon which to advance money." At a meeting of the Board of Directors and officials of the Commercial Exchange on the day following this action was promptly approved.

* * *

Chairman George C. Shane of the Exchange Transportation Committee has issued a well worded letter of warning and caution to the general grain, flour, feed and hay trade, asking them to be prompt in loading and unloading cars, and to do everything in their power to assist in the prevention of a car famine.

* * *

There has been little if any discussion or even opinions given over the rate decision recently rendered by the Interstate Commerce Commission affecting the leading trunk line transportation companies, and particularly the ruling as to the Eastern traffic section, since the war events and the outcome of the perplexing export grain situation has completely side-tracked all other important issues.

* * *

Frank Evans Marshall, secretary and treasurer of the North American Export Grain Association, since the war began has been, without a doubt, the busiest man on the entire grain floor, inasmuch as it is among his duties to keep in close touch with all of the foreign buyers and grain exchanges.

* * *

A York County farmer sent a fine sample of wheat here, and reports a ten-acre plot yielding fifty bushels to the acre, and wants to know if any one can beat it.

* * *

The Commercial Exchange wired a strong appeal to President Wilson at Washington, D. C., to aid the exporters of grain at Philadelphia in securing a satisfactory plan for the handling of foreign exchange by the banking institutions. The exact wording of the telegram was as follows:

"Philadelphia exporters of grain and flour request you to bring about a way and means for our New York and Philadelphia bankers to handle the foreign exchange."

"We have grain and flour on board vessels and in store for shipment to Europe, but cannot sell the documents, thereby stopping all foreign business, which is reverting to the farmer, reducing his prices and stopping the buying power of the exporter and the millers. Situation demands immediate relief."

* * *

A cablegram received here from the London Corn Association informed the export grain shippers that the United Kingdom, through arrangements made in England, would take care of the war risk rates that are placed on every manner of grain shipped

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

from this port on British vessels going to any ports in the United Kingdom, the English Government paying all extra war insurance rates.

* * *

The Philadelphia Stock Exchange was the very first one in the country to close in order to prevent any serious liquidation to the great injury of many of its patrons.

* * *

Within four days sixty million dollars in gold was shipped from the United States mint of this city, to New York, for the relief of the financial situation. Uncle Sam appears to have plenty of bullion when it is most needed.

* * *

Sydney Street, director of the Commercial Exchange, has fully recovered from a severe illness, and is attending to his regular duties about the grain floor. He was recently chosen vice-president of the Mutual Trust Company, which has its headquarters at the Fifth Street end of the Bourse building.

* * *

The Atlantic Transport Line gives notice that the ocean bill of lading will be in operation on and after September 1, for export shipments.

[Special Correspondence.]

BUFFALO

BY ELMER M. HILL.

Facing a condition unprecedented in the history of the grain trade, elevator interests, vessel owners and grainmen are speculating as to the probable results when the harvest begins to move eastward. With practically no trans-Atlantic transportation facilities it will be utterly impossible to handle the millions of bushels of grain in the Buffalo, Port Colborne, Ont., and Montreal elevators.

The grain elevators at the two latter Canadian ports are now filled to their utmost capacity and the structures in the Buffalo harbor are holding a full quota of grains. All kinds of rumors and idle speculation is advanced and re-advanced by individuals and concerns engaged in transportation and grain shipping fields but all join in saying it is too early to predict what will happen when the fall harvest of golden grain begins to come east for export.

* * *

It is generally understood in local circles and it is reported in press dispatches from London and Liverpool, England, that England will undertake to guarantee war risks on grain and the Chicago shippers are working in co-operation with the officials at Washington, trying to arrange for foreign exchange. The grainmen hope to accomplish something in the way of opening an avenue to the European countries, but even if they succeed the movement will be far from normal for some considerable time. That means the storage room at coast ports and at points on the lower lakes will soon be taken and that vessels to hold cargoes will be in big demand.

* * *

At vessel brokerage offices in Cleveland and Buffalo it is stated that there will be an unusually large demand for vessels of Welland Canal size from now until the close of navigation in December. These ships will handle the grains from the Canadian northwest from Port Arthur and Fort Williams on upper Lake Superior to Montreal by way of the Welland Canal. This will keep the grain away from the United States and will be entirely British risk.

* * *

Canadian troops are guarding the locks along the Welland Canal and government patrols are stationed along the waterway from Lake Erie to Lake Ontario in order to protect it from whatever damage may be attempted by forces or individuals hostile to Canada and England. Troops are also guarding the Canadian frontier along the Niagara River and at the Canadian end of the International Bridge from Buffalo to Fort Erie, Ont.

* * *

Ministers at Ottawa declare several threats have been made to blow up the Welland Canal locks and thus prevent the passage of grain vessels from Lake Erie to Ontario and thus to Montreal for transhipment to English ports. Several thousand soldiers, members of the Royal Canadian Reserves, have been pressed into service along the Niagara frontier for military duty.

* * *

Overheated machinery is given as the cause of a blaze which did damage estimated at \$2,000 to the plant of the Globe Milling Company. There is insurance.

* * *

The Lake Carriers' Association at Buffalo has been advised that the grain elevators and docks at Fort William and Port Arthur are under martial control. Masters and owners of vessels are required to get passages from agents before going ashore. According to reports from Montreal and the Board of Harbor Commissioners, the grain elevators at

that port are loaded to their capacity and it is also stated that the St. Lawrence River above Montreal to the sea has been mined by the English government to prevent the passage of hostile ships.

* * *

During July the Chicago shippers sold about 10,000,000 bushels of wheat for delivery at Port Colborne and lower lake Canadian ports. Sales for August for the same delivery have amounted to 18,000,000 bushels and of that amount about 7,000,000 bushels have been shipped. With elevators practically tied up the movement will be light for the remainder of the month unless some arrangement is made before that time for ocean tonnage to handle the export grain. When that will be done is a mere guess.

* * *

The Canadian railroads at and east of Georgian Bay on August 4, issued an embargo on grain. It is figured that there are about 200 vessels with a combined capacity of 50,000,000 bushels that will be available for storage grain if good rates are paid. Many of the grain men in order to get boats will be forced to guarantee that they will be unloaded by the opening of 1915 or pay a fixed amount per day for all the time the boats are held.

* * *

"Buffalo will be seriously affected by the great European war," declared Howard Smith, secretary-treasurer of the Western Elevating Association of Buffalo, to the writer. He added: "It is too early to predict all the serious consequences that will arise from the war but it will hurt the grain movement this fall. Elevators are fast filling up and with no trans-Atlantic movement, there will not be enough houses at the lower lakes to handle the grains. Some of it, of course, will be held at the Atlantic seaboard but this space will fast fill up. I don't know what the results will be."

* * *

Work is being rushed on the construction of two great concrete and steel fireproof elevators in the Buffalo harbor and indications point to the fact that both structures will be ready some time late this fall. While the details have not been announced it is generally understood a site has been selected for another new grain elevator and lake and rail connections on the Blackwell Canal. J. Talman Budd of 70 Linwood Avenue is the local representative of a syndicate which will finance the construction.

The Common Council of Buffalo recently voted to pay \$13,500 to oust some squatters from the Seawall strip. It is generally admitted this was done in order that the Pennsylvania Railroad could lay a switch to property owned by the Buffalo Harbor Land Company to accommodate an elevator which it is said will be constructed on the site. The elevator will cost upward of \$750,000.

The assurance that grain shippers are interested in the proposed new elevator project is given by Mr. Budd, president of the Buffalo Harbor Land Company, Charles H. Williamson and John J. Boland and others, who are interested in procuring for the port of Buffalo additional facilities for the handling and storing of grain, which they declare are absolutely necessary to prevent the diversion of lake grain shipment from Buffalo.

* * *

"Buffalo must soon awake or we shall find that our grain trade is going through the Welland Canal to Oswego, and that Buffalo will lose one of its greatest assets, the grain business," said John J. Boland, a large vessel owner and broker, before the Council when the appropriation was passed. He added:

"It is known to everybody familiar with the grain business that Buffalo is now losing every season approximately 25,000,000 bushels of grain, which is diverted to other routes and ports simply because Buffalo has not adequate facilities for handling and storing the grain. When the new Welland Canal is finished grain will come down the lakes and through the Welland to Oswego and the railroad rates for shipping to the seaboard ports will be much less than those on grain shipped from Buffalo. The only way to counteract that sort of competition is to build one or more elevators in Buffalo as quickly as possible, to hurry the New York State Barge Canal work, and thus to give to grain shipping the facilities which must be offered and which are not now sufficient. The principal obstacle to handling grain in Buffalo is that when grain is moving freely in the fall there is congestion and the elevators cannot handle all the grain, which causes great delay to boats in unloading. This causes the boats to demand additional pay, a quarter to half a cent per bushel, for the delay in taking out the loads."

* * *

The Connecting Terminal Railroad Company's new elevator on the site of the one destroyed by fire is rapidly being raised to completion, a monument to Greater Buffalo's waterfront activities. James C. Evans, vice president of the company, says he is confident the contractors will have the elevator ready some time in November. The Mon-

arch Engineering Company has the contract for the structure, which will have a capacity for approximately 1,000,000 bushels.

* * *

The Husted Milling Company's new elevator with lake and rail connections at the foot of Katharine Street on the Buffalo River to be known as the "Superior" Elevator, will be completed in time to handle some of the rush of grain which is usually experienced in the fall of the year. It will have a capacity for 1,500,000 bushels, and will cost approximately \$317,800.

* * *

W. J. Danforth, president of the Ralston Purina Company, of St. Louis, Mo., who was in Buffalo recently, says that definite details have been closed for the construction on the site of the old Husted Elevator in Elk Street, of a milling plant to cost upwards of \$500,000. Part of the old Husted Elevator is still standing and will be utilized. The new plant will be of concrete and steel construction and will have a capacity for 500,000 bushels of grain. A large receiving house and grain dryer will also be erected. Mr. Danforth was enthusiastic over Buffalo as a milling and grain center and stated the work will be rapidly rushed to completion. The new plant will be used solely as a manufactory for horse, cattle and poultry foods, a specialty being made in molasses products. This branch of the company is to be greatly increased and the plant will soon be one of the largest in Buffalo.

* * *

Settling a question of importance to competing grain dealers in western New York, the public service commission of the state has issued an order directing the New York Central Railroad to amend its tariffs so that the rate shall be the same on grain in car lots to Niagara Falls from Hamlin on the Ontario division as from Brockport on the Falls branch.

[Special Correspondence.]

ST. LOUIS

BY RALPH O. JOHNSON.

The St. Louis market like other grain markets of the world has had its war scare, and not in the history of the Merchants' Exchange has such excitement been witnessed since the famous Leiter corner in May wheat. Even that important deal was less spectacular than the recent rise, as the picture of a general war in Europe gave an international color to the market never before equaled. What could be more picturesque, from the market standpoint, of a rise of 20 cents a bushel in wheat values, which had the following setting for a background when the war cloud lowered over Europe: First, panic and business ruin in the cities of the old world, and drastic liquidation of securities and upheaval of credits in Wall street. This was followed by the closing of the world's stock exchanges for the first time in their history, a wild rise in foreign exchange rates and shipping risks that carried the premium on gold to the record figure of \$10,000 per million taken for export, while, despite the excessive rate, \$45,000,000 was contracted for shipment in one day. Interest rates in all markets mounted furiously and the Bank of England, in order to protect its gold supply, advanced its discount rate from 4 to 10 per cent, the highest figure ever charged by the institution and one only twice reached in the past 100 years. The rate later was lowered. Specie payments were practically suspended in France, Germany, Russia and other foreign countries, and England waived the Bank Act, which practically placed the country on a "war currency basis." In New York measures were taken to relieve financial stress in the United States and the Government immediately authorized the issuance of \$500,000,000 in emergency currency under the Aldrich-Vreeland act. Plans also were immediately laid to aid the banks and investors in paying for \$100,000,000 in securities purchased from Europe while the war scare was on, before the New York Stock Exchange closed. Money on call in Wall Street rose from 2 to 10 per cent, with rates of 10 per cent immediately after the Stock Exchange was closed. Surplus reserves of \$23,700,000 were wiped out and a deficit of \$17,400,000 established. All these events happened with lightning like rapidity and were crowded into a week's time. The grain markets of the world were thrown into a fever of excitement. Futures mounted 20 cents a bushel in Chicago, with a like rise in St. Louis, with a 9 1/4 cents rise in one day, only to lose a large percentage of the advance and then mount into new high territory. Failures on a large scale in Chicago were averted only by heroic efforts of wealthy commission houses, especially the Armour Grain Company, which announced that any firm in trouble would be assisted, and took over 8,000,000 bushels of trades that were in danger of not being safely settled. At the same time strong houses were aiding weaker ones in the St. Louis market. The Chicago Board of Trade, however, was enabled to maintain its record of never having closed, and not a failure was announced, although 75 firms and

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

111

individuals on the floor were said to have been involved. During the excitement exports of wheat and flour for one week rose to record figures of 9,615,000 bushels, and over 50,000,000 bushels of wheat were contracted for export but were unable to get away, owing to lack of shipping facilities or adequate safe foreign outlets, as shipments would have to be confined to neutral ports or run the chances of confiscation, risks of delay, or loss by blockades. Wheat in Liverpool rose 6 to 7d in one day, while other foreign markets were closed. France, Germany, Russia and other foreign countries prohibited the exportation of grain and removed the import duty on the same products, and like action was planned by other foreign countries. Supplies of wheat at Antwerp were taken by the Belgium government and holders told to accept terms or have their grain seized. These were the most important factors in the most sensational market movement the world has ever known.

* * *

Edward A. James, president of the Neola Elevator Company at Chicago, Ill., has been admitted to membership in the St. Louis Merchants' Exchange. Mr. James has been associated with the Armour Grain Company, which operates the Neola Elevator, for several years, and is well-known in St. Louis grain circles.

* * *

T. E. Price, head of the T. E. Price Commission Company, St. Louis, missed the war scare in wheat, as during the excitement he was hunting and fishing in the Maine woods, and when war was declared and prices rising in a sensational manner was 25 miles from a telegraph station and did not know for days that war had been declared. The St. Louis wheat market, also missed Mr. Price, as in times like the present he is one of this market's biggest traders. He jokingly remarked to some friends on his return that had he known there was going to be such a war scare he would have taken the market with him.

* * *

The war scare tied up export shipments of wheat so completely after it became assured that a general conflict would result in Europe that St. Louis grain dealers and millers found themselves facing a steady movement of wheat arrivals, without any apparent outward movement to help them finance the selling end of their transactions. The condition became so adverse that means were adopted to limit shipments as much as possible, and induce the farmer to hold his grain until a more favorable opportunity for its handling arrived. In the interest of this endeavor members of the Merchants' Exchange met and agreed to send a letter to all country customers and correspondents. The letter stated: "Owing to unsettled conditions arising from the warlike situation in Europe and especially the fact that elevators in St. Louis are becoming badly congested with grain by the large volume of wheat that has been poured into this market, we deem it inadvisable for country shippers to make any further consignments of grain to St. Louis at the present time, unless it precipitate such a blockade of railroads and elevators as will make it impossible to handle the grain promptly and result in the accumulation of heavy demurrage charges, or an unwarranted sacrifice of values." The letter had a considerable influence in checking the movement to market. Marshall Hall, of the W. L. Green Commission Company, and president of the Merchants' Exchange, says that the chances of congestion in the market are now decidedly lessened.

* * *

The brakes were clamped down hard on speculative trading, when prices commenced to "rocket" on the war scare. After the 9 $\frac{1}{4}$ cent rise in one day, A. C. Petri, St. Louis representative of Bartlett-Frazier, Chicago; Oswald Graves, representative of Shearson, Hammill & Co.; W. E. Stewart, of Ware & Leland; Cary Bacon of Armour & Co.; William Roche of Logan & Bryan, Chicago, and other representatives of important commission firms announced that margins of 10 to 15 cents a bushel would be demanded on all trades, especially on the short side. This took the speculative steam out of the market very quickly, and was a direct cause of a return to normal conditions of trading, which otherwise might have been disastrous to traders as well as to commission houses.

* * *

Hugh Paul, representative of Rose T. Smyth & Co., grain and flour importers of Liverpool, was in St. Louis recently and consulted with members of the Merchants' Exchange regarding export business. Mr. Paul declared the question of facilities for handling export business, under present conditions, was the hardest nut he had ever had to crack.

* * *

St. Louis millers were in a peculiar position when the wheat market advanced 9 $\frac{1}{4}$ cents a bushel in one day on the war scare. Peyton T. Carr, president of the Kehlor Flour Mills Company, said the upturn was almost entirely lost on the flour trade. His firm, he said, had heavy selling offers out on

flour when the rise came, but for some unknown reason buyers failed to snap them up, and by the time instructions were wired to recall prices only about 10 per cent of offers had been taken. Mr. Carr said it was one of the most unusual conditions that had ever confronted him in the flour trade.

* * *

A rise of 8 to 9 cents a bushel in cash wheat, with a loss of the total upturn all in a week's trading, has seldom been witnessed in any grain market, but that was what happened when war news first stimulated the cash wheat market on the St. Louis Merchants' Exchange. Prices rose from around 79 cents to 88 cents, with a 4-cent upturn in one day, only to drop back practically to where they started at the beginning of the week. Martin Mullally of the Martin Mullally Commission Company, W. H. Toberman of Toberman, Mackey & Co., W. B. Anderson of the Nanson Commission Company, and other prominent cash grain handlers declared that the movement in prices was one that they had never before seen equaled.

* * *

The St. Louis Merchants' Exchange has temporarily abandoned the "to arrive rule" on grain, passed July 13, which provided for posting members' bids and establishing prices to be bid in the country for 24 hours following. The action followed a request by State Attorney-General Barker, who had the rule under investigation, following a complaint of Edward M. Flesh, president of the C. H. Albers Commission Company, that the rule was detrimental to the welfare of the St. Louis grain trade, was in restraint of trade under the Missouri statute, and asking that the attorney-general file suit to have it declared. A meeting of the directors and members of the Exchange will be held shortly, to decide whether the rule shall be abolished, modified or left to the courts to test its constitutionality.

* * *

Twenty-one automobiles filled with members of the Pettis County Bureau of Agriculture, the Sedalia Boosters' Club and others made a six days' campaign to further the growing of alfalfa on the 3,100 farms in Pettis County. Accompanying the party were Dr. Lyman D. Brown, deputy state veterinarian, Columbia; Prof. T. R. Douglass, I. T. Simpson and M. I. Hurley, of the Missouri State University; H. R. Nelson, editor of *The Farm and Stockman*; Turner Wright, livestock editor of the *Missouri Ruralist*. Several St. Louisians were in the party.

* * *

E. C. Dreyer, of the Dreyer Commission Company, St. Louis, is spending his vacation with his family, who are at Manatawa, Mich., for the summer.

* * *

State Auditor John P. Gordon recently apportioned a total of \$203,000 of good roads funds to counties in Missouri. Of the amount \$28,000 was derived from the sale of option stamps. Over \$5,000 of the option money will be used on roads near St. Louis, which Merchants' Exchange traders expect will make the "future" riding good.

[Special Correspondence.]

PITTSBURGH

BY HENRY REICH, JR.

A Pennsylvania charter of incorporation has been granted the Newsome Feed & Grain Company of this city. The new concern is capitalized at \$25,000.

* * *

The Pennsylvania Railroad Company has placed an embargo on export freight routed for a total of 14 steamship lines, which have ceased operations as a result of the European war. The Baltimore & Ohio's embargo was placed earlier, and having been anticipated, little freight has been held up. The embargo will affect the shipment of a vast amount of grain from the Western states, but the majority of this, it is believed, will be held up at points west of Chicago. According to the Pennsylvania Railroad Company's order, freight shipped as domestic freight to the seaboard and then exported will not be subject to the through joint export rates. Export shipment on other steamship lines than those named in the embargo must be confirmed through the office of the Foreign Freight Department at Philadelphia.

* * *

The Department of Agriculture at Washington has just issued a statement giving the data of the wheat crop of Pennsylvania this year. According to the statement the crop amounted to almost 24,000,000 bushels, valued at 85 cents a bushel, making the crop worth more than \$20,000,000. The actual number of bushels harvested was 23,878,000, an average of 18.2 per acre, compared with 21,862,000 bushels last year, and 21,290,000 as the average for the last five years, with 16.9 bushels as the average for the last ten years.

The corn crop of Pennsylvania is far above the average, and the price being up, corn growers should get more for this year's crop than for some

time. This crop, as estimated by the Department of Agriculture, should be worth almost \$50,000,000. The estimated production this year is 61,200,000 bushels, valued at 81 cents a bushel as of August 1. The average production for the last five years has been 56,524,000, valued at 77 cents.

The oats crop in Pennsylvania is not so good as the average for the last five years, nor is the price of oats quite as high as the five-year average. This crop is estimated to be 32,100,000 bushels, valued at 48 cents per bushel, making a total value of \$15,500,000. The average crop for the five years past has been 34,464,000 bushels, and the average price for this period has been 53 cents.

The total value of the wheat, oats and corn crop will be in excess of \$85,000,000, according to the estimate of the Bureau on prices of August 1, which have since advanced considerably and therefore made the crop still more valuable.

* * *

The usual activity of the Pittsburgh Hay and Grain Exchange has been somewhat handicapped this month by the advent of the vacation period. Starting with the middle of July the familiar faces about the 'Change began to disappear with great regularity. In due time they would return, usually tanned and hardened, to take the place of other disappearing grain men. Samuel Walton, of the Samuel Walton Company, is now spending a few days in the Middle West on a combination business and pleasure trip. F. L. Stewart, of C. A. Foster, is now enjoying country air and rural delights on a farm, and John A. Moore and Joseph C. Moore, both of J. A. Moore & Brother, are at Atlantic City, while C. M. Hardmann, of Hardmann & Heck, is also taking a well-earned vacation.

* * *

At a luncheon of the Pittsburgh Traffic Club a prominent railroad official of this city spoke on the prospects of car shortage. He said: "Already railroads in the eastern part of the United States have felt the effects of the war in Europe, which in a moment, almost, has caused the car shortage problem, already looming up, to assume doubly menacing proportions. The announcement that the unusually heavy wheat crop in the West would have to be moved started the wheels moving in repair shops and car foundries, and the prospect of a double-quick rush of wheat to the Atlantic Seaboard for European shipment has had the effect of throwing a scare into the carriers. They are not prepared for the unusual emergency."

"The first shipment of western wheat to Philadelphia and to Baltimore, where the largest exporting grain elevators are located, has begun and large numbers of cars are passing through Pittsburgh daily. The railroads have been working overtime to get freight cars repaired and in service, and with the new demand, the added embarrassment of having cars belonging to western roads called home has been acutely felt."

"Roads to Philadelphia and Baltimore expect a record-breaking business to the grain elevators. Fortunately both the Pennsylvania and the Northern Central have just completed several large new elevators in Philadelphia and Baltimore, and the shipping facilities in both cities have been extended sufficiently to handle the movements."

* * *

The business of the Pittsburgh Hay and Grain Exchange has been increased considerably within the past two weeks. Up to the first of August all receipts have been light, but there is a decidedly increased activity in arrivals at present. New hay is coming in heavily but there is not much of a market at present. Oats are being received in large volume and the demand is more active.

* * *

C. G. Burson, traffic manager and superintendent of the local exchange, is making plans for a vacation to be spent in the country districts of Ohio. The sympathy of the exchange members and friends of Mr. Burson have been extended to him because of the illness of his little child. It is in the hopes of having the child recover that Mr. Burson will take his family to the country.

* * *

D. R. Austen, of Austen Brothers, grain and hay dealers, was elected a member of the Pittsburgh Hay and Grain Exchange this month.

* * *

After a siege of illness lasting seven weeks James A. McCaffery is expecting to be on duty again about September 1.

* * *

Grain men in this district will be notified by the local representative of freight traffic departments that the railroads of the country affiliated with the American Railway Association are determined to mitigate, even though they may be unable to end, the practice of tracing shipments, which railroad officials declare to have assumed such proportions as to become a positive burden and to constitute a great evil. To that end, grain dealers will be informed that hereafter tracing of shipments, whether by wire or mail, must be confined to such as may be unduly delayed in transit; that no tracing shall be done until, in the usual handling of freight,

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

consignments should have reached destination. In other words, the practice of tracing from initial point to destination immediately freight is offered for shipment, as is required in so many cases at present, and of advancing consignors of delivery, or of issuing passing reports en route to shippers and consignees, shall be discontinued. The action is based on the assumption that indiscriminate and unnecessary tracing impairs effectiveness of service and that far better results will be secured if tracing be confined to actual needs. The practice of having a "tracer" sent after a shipment as soon as it is consigned in order to accelerate delivery has become general among the grain interests of this district and the order forbidding this tracing and the issuing of passing reports will, to some extent, be a handicap to the trade.

[Special Correspondence.]

INDIANAPOLIS

BY F. J. MILLER.

The wheat market in Indiana has followed in a general way the movements that have marked prices and demand in other centers, but has been slower to respond to flurries, and while showing a steady increase in prices, has not yet reached the point desired by farmers. Of course nothing but dollar wheat would really satisfy the Indiana farmer—and he may come to that—but with the mills buying at 85 cents when this is written, all the depression at first caused by the size of the crop has disappeared and the grower is faring well.

The Indianapolis Board of Trade has not suspended its activities in any way, although business in many ways has slowed down while awaiting a determination of the question as to what is to be done with the wheat. The local stock exchange followed the example of those of the larger centers, but the grain market remained open. Although the condition of the Chicago market greatly affects the state of local trading, the quick jumps on the Chicago board were not followed here.

What dealers are now worrying about is the naval battle, or battles, which shall decide the control of the trans-Atlantic shipping lanes and shall determine which of the warring European nations gets our wheat. Exporters have been greatly affected by war conditions, both as concerns shipments on the way to Europe and contracts which they have or hope to get for European trade.

The Blish Milling Company of Seymour was one of the first to take action in respect to this. It had a large shipment at sea and one in New York when war between Great Britain and Germany was declared. Accordingly two telegrams were immediately sent to Congressman Lincoln Dixon, urging him to support action that "will secure to American commerce unrestricted movement in foreign markets at contract rates, by permitting foreign ships to take American register, or such other steps as may secure proper safeguarding of shipments." Other Indiana millers have taken up the same question and are hoping for its early solution.

* * *

Local flour mills have advanced flour 40 to 70 cents a barrel since wheat began to climb. Domestic trade is fairly good, but exporting, of course, is shut off for the time being.

* * *

Indiana has been suffering from the prolonged drought, and the corn crop in many sections is in serious danger. Rainfall, which was practically general in the central, northeastern and southern parts of Indiana August 9 and 10, brought great relief to farmers. It is expected that while crops will not be nearly what they would have been without the prolonged drought of the summer, the rain will prevent a total loss. Aside from a few thunder showers that did no lasting good, the southern part of the state had had no rain since May. In many places corn was literally burning up in the fields. Many farmers say they will save fifty per cent of their corn crop. Others had already begun to cut the corn for ensilage, saying that with their silos they could probably reduce their loss to thirty per cent.

Plowing for wheat began in some Indiana counties before the present crop was all threshed, a thing quite unusual.

* * *

The Sweger and Witt elevator at Clarks Hill burned with a loss of \$6,500, partly covered by insurance. The fire started in the engine room and the flames soon consumed the entire building with the contents, consisting of five hundred bushels of corn. This was the third elevator in that district to be destroyed by fire in two weeks and the state fire marshal began an investigation.

* * *

Many Indiana farmers are planning for seeding fields in alfalfa; the experts at Purdue University are spreading information. A number of alfalfa tours have been held in various counties to arouse interest in the crop. Prof. G. I. Christie, of Purdue, has summarized as follows, the requirements for

successful alfalfa culture: (1) A well-drained soil; (2) soil well supplied with lime; (3) plenty of decaying organic matter; (4) inoculation, present or supplied; (5) a supply of available plant food; (6) land practically free from weeds; (7) seed bed thoroughly fine and compact; (8) pure seed of the highest quality.

* * *

The Indiana Corn Products Company of Lafayette, has been incorporated with a capital stock of \$10,000, to transact a grain business. The directors are G. F. Mug, F. C. Starkey and Henry Seyfried.

* * *

The Home Grain Company of Lagrange has increased its capital stock from \$10,000 to \$16,000.

* * *

During the drought in Hamilton County the Rev. P. Miller, pastor of the First Presbyterian church of Noblesville, extended a general invitation to the public to attend union services for the purpose of praying for rain.

* * *

The Gilbert Hawkins grain elevator at Fowler, was destroyed by fire recently. The flames got a big start on the interior of the sheet iron structure and did not break out until the building was doomed. The loss was \$5,000, with \$2,500 insurance. A number of corn cribs close to the elevator were saved by a volunteer fire department. It is believed the fire was of incendiary origin and that the same man who set the Babcock & Hopkins elevator fire at Rensselaer a few days before may also have started this one. The Babcock & Hopkins elevator was the largest in Jasper County and had been built two years ago to replace another one that was burned there. It contained several thousand bushels of corn and several thousand bushels of wheat and oats. The loss was \$50,000, partly covered by insurance.

* * *

Corn grown in Bartholomew County from part of a shipment from Argentina is being exhibited by E. W. Bassett in the Board of Trade Building. It was planted at the usual time under the same conditions as domestic seed and is as far advanced as any of the Indiana corn, with indications that it will thrive here. As far as is known, this was the first corn from South America to be planted and grown in North America. Mr. Bassett was one of the first men in the United States to import Argentine corn and in response to inquiries that followed the publication of this fact, sent out more than two bushels of Argentine corn in small envelopes to every part of the United States. The grown stalks exhibited in the Bassett office were the results of this and were grown near Columbus, Ind.

* * *

Frederick Neuhaus, of Paris, France, was a recent visitor in Indianapolis, where he stopped for a few days while on a business trip to this country to buy 20,000 bushels of seed corn. Mr. Neuhaus, who is a grain dealer in Paris, sends about 50,000 bushels of red clover seed to America every year. Under the new tariff this enters the United States duty free.

* * *

The Jenkins & Cohee elevator at Whitestown, one of the largest in Boone County, burned when a fire which started in a pile of corncobs near the engine room spread to the main building. The elevator was in the central part of the town and several business houses were endangered, but a bucket brigade saved them. The loss on the elevator was estimated at \$30,000, partly covered by insurance. Considerable grain was burned. Jenkins & Cohee expect to rebuild in about sixty days.

* * *

Anderson grain dealers estimate that the new crop of wheat in the Anderson market will amount to \$90,000. Most of the shipments have been to New York and Philadelphia for export, although the destination of the shipments is uncertain, since the development of the European war situation. For many years Toledo got most of the wheat from Anderson, but this year, because of lower freight rates and better prices, shippers planned to send most of it to the seaboard.

* * *

McMahan Brothers of Valparaiso have been incorporated with a capital of \$10,000 to deal in hay and grain. The members of the firm are Willis C., Zenas J. and Berte D. McMahan.

* * *

Arley Hardy, age forty, a miller of Charlestown, died suddenly at his home. He is survived by a widow and nine children.

* * *

The Indianapolis Board of Trade came out second best in its baseball game with the Chamber of Commerce, the score standing 13 to 11 after five and a half innings play. The Charity League, as it was termed, played at the Federal League park for the benefit of the News' Fresh Air Fund and the Star Summer Mission Fund. Mayor Joseph E. Bell umpired. Bert A. Boyd was so badly "injured" in sliding for second that it was found necessary to call a newspaper photographer to take a picture of

the sufferer. The line-up of the Board of Trade team was as follows: Walter D. Jones, third base; Frank A. Witt, first base; Tom Oddy, center field; R. C. Daus, catcher; E. L. Donahue, shortstop; George H. Evans, right field; Edgar H. Evans, left field; Bert A. Boyd, second base; Aquilla Q. Jones, pitcher; Adolph J. Meyer, chief baseball counsel of the team. The substitutes were: J. E. Pierce, William H. Howard, Joseph A. Kebler, A. M. Glossbrenner, Edward D. Evans, William L. O'Connor, Warren H. Simmons, L. L. Fellows, E. Clifford Barrett, Frank D. Stalnaker, Benjamin A. Richardson, Joseph C. Gardner, Henry T. Hearsey, John T. Saulter, James M. Brafford, John J. Appel, John S. Lazarus, Charles C. Perry, J. H. Taylor, William H. Cooper, L. C. Boyd, Sidney M. Dyer, William J. Mooney, John E. McGettigan, Horace E. Kinney, P. E. Johnson, E. H. Darrach, Edward B. Raub, Harvey Mullins, Roscoe O. Hawkins, Benjamin B. Minor, William Scott, Otto R. Lieber, Joseph R. Cavanagh and Ralph A. Lemcke.

* * *

More than a thousand rats—1,023 to be exact—were killed in a warehouse in which hay was stored at Aurora. Seven men, aided by five dogs, three cats and four ferrets did the job in four hours. All the hay was taken out and the rats driven from shelter.

* * *

Yeggmen pried open the doors to the Bloomington Milling Company at Bloomington and with a wagon hauled the safe to the Kinser pike, a mile north of the city, where it was wrecked with dynamite. There was no money in the strongbox and a notice was posted on the door to the effect that it contained only books and papers. Two men were arrested in connection with the case.

* * *

The Board of Trade has appointed the following committee to study questions relative to taxation and exchange data with other bodies engaged in similar work: L. C. Boyd, chairman; Eugene H. Darrach, Horace E. Kinney, Otto R. Lieber, Ralph A. Lemcke, Roscoe O. Hawkins, Edgar H. Evans, Volney T. Malott, John P. Frenzel, G. A. Efroymson, August B. Meyer, L. C. Huesman, H. B. Hibben, Louis Hollweg and J. C. Schaff.

* * *

In response to a request from the Indiana Good Roads Association, \$250 has been given to help defray the expenses of a state commission to investigate road conditions and legislation.

* * *

An automobile has been bought for the grain inspection department.

[Special Correspondence.]

DULUTH

BY S. J. SCHULTE.

Wheat operators at Duluth have had plenty of action for their money during the past few weeks. It is interesting to observe that between July 14 and August 8 the market has recorded an advance of 23 cents, the cash price of No. 1 Northern on the former date standing at 89 $\frac{3}{4}$ cents as compared with \$1.12 $\frac{3}{4}$ on the latter day. The outbreak of the war was of course responsible for this sharp bulge, but it is to be noted that the market was steadily working its way upward before there was even a breath of any serious foreign trouble being likely to intervene. Up to July 27 prices had gone up 6 cents, and then the next day, with the announcement of the outbreak between Servia and Austria coming out, a bulge of 6 $\frac{1}{2}$ cents was chalked up. The previous strength had been created through a realization that the spring wheat yield would show a substantial falling off from the figures shown in the July Government report, attributable to the appearance of black rust and hot weather conditions. The opinion is, however, generally entertained by crop experts here who are in close touch with the situation, that the ultimate yield will exceed the 236,000,000 bushels named in the last government crop estimate. It is felt that last year's crop record of 240,000,000 bushels will at least be realized. With the present excess in prices amounting, at this writing, to 15 cents a bushel over the quotations ruling a year ago, it is figured out that farmers are going to realize a tidy sum for their crop, and will be materially better off. Furthermore, where quotations will go after the foreign exchange difficulty has been straightened out and export shipments resumed can only be conjectured.

* * *

The oats crop will also be a profit earner for Northwest growers, as evidenced in the fact that prices show a gain of eight cents a bushel from their figure of three weeks ago and now stand at 41 $\frac{1}{2}$ cents.

* * *

The most startling situation on record developed in the Duluth flaxseed market this week. As a result of a break of 12@13 cents a bushel materializing during the first fifteen minutes trading last Monday morning, the clearing house declared the

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

113

market closed. This drastic action was taken in view of the fact that the market was absolutely without support, and with the catching of stop loss orders, there appeared to be every probability that the break would extend to unheard of levels. As it was, some prominent operators were throwing out urgent signals of distress, and it is conceded that serious failures were only avoided through the action taken by the Board. The wisdom of this course was evidenced in the trend of the market when trading was resumed under sane conditions today. Quotations opened from 10 to 13 cents above their previous close, and even at that only small lots were offered. Traders specializing in flaxseed entertain bullish views regarding the ultimate course of prices in the seed. It is predicted that the yield in the American Northwest will fall materially below last year's tally of 18,000,000 bushels, while it is admitted that the crop in the Canadian West has been shot to pieces in the long extended period of drought that has prevailed up there. With Russian supplies shut off through the war, it is thought that even in spite of the general unsettlement in foreign industrial affairs, a strong demand will be met with in this country from Antwerp and other markets. The possibilities offering in the market can therefore be only conjectured, some of the experts think. A development, commented upon at the end of last week, came in the importing of a cargo of flaxseed from Fort William by the Ames-Brooks Company. This is the first occasion in several years that flax was brought in here by water.

* * *

The movement of grain to the Head of the Lakes is expected to start during the third week of this month, as on the whole the crop is estimated to average about ten days earlier in reaching maturity than last year. Cutting will be general during the coming week over many North Dakota districts distinctly tributary to this point. All the elevators are ready for the opening of the new crop season. Outside of flaxseed, which bulks up at 2,666,000 bushels, stocks now being carried here are merely negligible. It is expected that orders from Eastern crushers will be placed in the near future for much of the flax now in store, judging by the inquiry that has been received from interests down that way during the last few days.

* * *

Nothing definite has come out yet regarding the proposal of the Consolidated Elevator Company to build an addition to its plant, as intimated some time ago. It is now thought, however, that action will be deferred till next season in view of the Northwest wheat crop having fallen below the earlier estimates.

[Special Correspondence]

MILWAUKEE

BY C. O. SKINROOD.

Grain traders at Milwaukee are at this moment much agitated over what method is to be used by the United States to get their wheat exported while the great European war is in progress.

"I believe that Great Britain will sweep the seas very soon and that will give grain vessels a chance to move again," said Wallace M. Bell, the senior member of one of the largest of Milwaukee's grain firms. "I believe that England will establish her supremacy on the ocean before long and that will supply the ships which are now lacking."

"Some method must be found and will be found to move the vast stores of wheat which are congesting American markets at this time. Judging from the English victories up to this time, it will not take long to bring about this very desirable situation."

"If this solution fails, it is more than likely that provision will be made to register American ships. The United States also has a hundred vessel transports which might be used to bring wheat to Europe."

"After talking with some of the most prominent grain men in Chicago and elsewhere I am convinced that much higher prices will be coming for grain. A price of \$1.75 a bushel for wheat and 75 cents for oats is not a fantastic figure in view of the fact that millions of men will be in the field before the European campaign is two or three months older. Most of the traders are very strongly bullish on the market despite the depressing exporting influence in the trade just at this time."

* * *

Early in the war campaign the Milwaukee market for futures was greatly excited. For one day, just after the Austrian campaign opened against Servia, the trade was the largest the Milwaukee Chamber of Commerce has ever recorded. After the spurt of nine cents a bushel in one day, Carl Baumann, prominent trader, declared that "the war prices are not likely to hold for any length of time judging from what took place in the Spanish-American war in 1898." He said that a large number of Milwaukeeans were on the wrong side for profits, many of them at that time having sold

short because of the enormous wheat crop of the United States. Since that time many of the local traders have turned bullish because of the prospects of selling vast amounts of wheat to the war-ridden countries of Europe. It is also significant that many of the local traders assert that all grains are likely to follow the upward ascent of wheat. Corn is expected to advance with wheat, and oats, too, should keep pace with the higher level of values for all other grains.

* * *

The Milwaukee Chamber of Commerce sent a telegram of condolence to the President of the United States on the death of Mrs. Wilson. The message included this statement: "The six hundred members of this Chamber want you to know that your sorrow is shared by them and that in the passing away of Mrs. Wilson they grieve with you, and that while it is your loss, it is also the loss of the American people."

* * *

Milwaukee bids fair to hold its palm of being the world's greatest barley market, although the season for new barley has not progressed far enough to give indications of strong tendencies. The movement of the new crop is still small but it is increasing. Maltsters and pearlers are in the market actively each day and prices are steadily advancing. The range of values is from 50 to 60 cents a bushel for qualities ranging from feed up to the highest class of malting barley. Some of the fancy is bringing as high as 62 cents a bushel.

* * *

The corn movement at Milwaukee is rather limited and there is good buying evident both from shippers and from local manufacturers. There has been a constantly increasing demand for the yellow corn and it has commanded premiums over both the white and the mixed varieties. The market is kept bare of supplies because of the aggressive demand and larger amounts of corn could be placed at Milwaukee to good advantage.

* * *

Milwaukee grain men say that the Milwaukee market is offering premiums over surrounding markets in order to attract oats supplies here. The buying by shippers is insistent and purchases for feed and cereal needs are heavy enough to make a very strong market. Prices early in August ranged largely from 33 to 39 cents a bushel with a constant tendency toward higher level.

* * *

Wheat prices have been rushing upward for the last few days with shippers and millers absorbing all the wheat offered very readily. At the advanced prices the No. 1 Northern sold from \$1.10 to \$1.14, which is high enough to make a very high selling price for the farmers of the West. Earlier in the month the best grades of Northern did not sell much higher than \$1 a bushel.

* * *

Rye prices are steadily mounting at the date of writing with sales up to 71 and 72 cents for the No. 1 and 2 grades. The movement of the new crop of rye is still rather limited. Milwaukee grain men assert, however, that Milwaukee will more than hold its own the coming fall as the country's principal rye selling center. Shippers and millers keep the market well cleared, indicating that more could be absorbed by the local trade if offered.

* * *

A protest has been filed by the Milwaukee Chamber against what is termed unjust action by the railroad officials at Milwaukee, carriers attempting to adopt the following amended form of switching receipts: "This company will NOT assume any duty as common carrier to safely deliver such car at the stated destination, nor assume any responsibility for count, condition, or weight of said car." Milwaukee grain men expect to have the railroad commission of the state put an end to such "arbitrary" action.

* * *

J. H. Puelicher, vice-president and cashier of the Marshall & Ilsley Bank, and J. L. Crittenden, have been elected to membership in the Milwaukee Chamber.

* * *

The hearing which was to have been held at Milwaukee July 22 by the Interstate Commerce Commission in the matter of switching rates has been postponed to a later date to be fixed by the Commission.

* * *

One of the oldest members of the Milwaukee Chamber, who has been connected with the local board continuously since 1876, is dead. O. W. Williams, who recently moved to Chicago and who was a member of the Milwaukee exchange, is dead. Herman Fuldner is also among the recent deaths in the Chamber.

* * *

The Western Railway and Inspection Bureau has issued a notice to transit stations in Wisconsin, withdrawing the recent circular which provided

that the grain reconsigned from Milwaukee, via the Northwestern road, would not be granted transit privileges. The previous instructions were issued under a misinterpretation of the rules.

* * *

Prof. R. A. Moore and the Milwaukee weather bureau have reported that crops in Wisconsin have never been better than now. Harvesting was done in most counties under the most favorable conditions and a large part of the grain has been stacked. Threshing is in progress in many parts of the state.

* * *

S. W. Tallmadge, who has been a member of the Milwaukee Chamber of Commerce since 1863, who has been mixed up in many large deals in grain when he was active in the business, is dead. Probably no Chamber member was better known over the city and state than Mr. Tallmadge. He had much to do with giving the Chamber the reputation of being the most generous organization in Milwaukee. He took the initiative in collecting large sums for all sorts of worthy philanthropic enterprises. Many thousands of dollars had been collected in these campaigns. Mr. Tallmadge had been ill for many months and had not been engaged in active trade for some time. He was the oldest member of the Chamber, according to reports, at the time of his death.

* * *

For one week recently Milwaukee bank clearings were reported 22 per cent larger than a year ago and for the month of July bank clearings were 16 per cent larger than a year ago, which indicates a much brisker business in Milwaukee than in many other American cities.

* * *

The manager of the Freight Bureau of the Milwaukee Chamber has appealed to the members of the House Committee on Interstate and Foreign Commerce at Washington urging support of the Pomerene Bill relating to bills of lading, which was recently passed by the Senate.

* * *

The first cars of Wisconsin rye for the season were received at Milwaukee the latter part of July and handled by the E. P. Bacon Company and the Buenger Commission Company, grading No. 1 and 3 respectfully, and bringing 68 and 66 cents per bushel. W. M. Bell & Co. received the first car of new oats, Iowa grading standard and selling at 37½ cents a bushel.

* * *

Milwaukee grain men report that never before has South Dakota's grain prospects been as bright as now. Remarkable yields are looked for.

* * *

The first annual picnic of the employes of the Grain Inspection Department of the Chamber of Commerce was held on August 9 at Okawee Lake. A baseball game and other sports were among the attractive features of the program.

* * *

The stocks of grain in Milwaukee at the close of business August 1 were given by the secretary of the Milwaukee Chamber as follows: Wheat, 126,000 bushels; corn, 107,000 bushels; oats, 185,000 bushels; barley, 215,000 bushels; and rye 8,000 bushels.

* * *

The Finance Committee of the Milwaukee Chamber has fixed 6 per cent as the August rate on grain advances. This is an indication of tighter money, 5 per cent having been the prevailing rate formerly for several months.

* * *

The Interstate Commerce Commission suspended from August 1 to November 29 the operation of certain schedules which provide for the cancellation of proportional and reshipping rates on grain and grain products from Milwaukee via Chicago and Junction points to various points in Central Freight Association and trunk line territory, which provided for future application of local rates on such traffic. The present reshipping rates on grain and grain products from Milwaukee to New York City and local rates between these points are as follows: Reshipping rates grain, carloads, 16 cents per 100 pounds and 16.7 cents on carload grain products; local rates, 20.5 cents on grain per 100 pounds in carloads and 21.2 cents for grain products.

* * *

A branch office was arranged to be opened in Milwaukee by Henry Rang & Co., members of the Chicago Board of Trade.

* * *

H. Clay Shaw is among the new members of the Milwaukee Chamber. The Western Cold Storage Company's warehouses A, B, C and D, have been made regular for the storage of provisions.

* * *

A large number of correspondents of the Cargill Grain Company have reports from South Dakota showing general rust in wheat fields. There is some damage to blue stem wheat and blight is also responsible for some reduction in yields. Despite these adverse influences the crop of grain in South Dakota is confidently expected to pass all records. This state furnishes a large amount of grain sold

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

at the Milwaukee market, hence its great interest to Milwaukee grain men.

* * *

Walter P. Bishop of the E. P. Bacon Company has just returned from an extensive trip through the west. He reported some wonderful crops of grain that he had observed in the far western states, especially in the state of Washington.

* * *

Railroads in Milwaukee are at the point of notifying shippers to conserve their cars as far as possible, so that they can be used in the grain trade and for the added movement in business looked for in the fall. The war in Europe has reduced grain trade to some extent, so that the difficulty in providing cars has not become acute as soon as expected.

* * *

Reports in Milwaukee after the decision in the 5 per cent rate case indicate that there will be no rate advances that will affect Milwaukee, to points east of Buffalo.

* * *

[Special Correspondence.]

TOLEDO

BY E. F. BAKER.

Reticence is perhaps the strongest characteristic of grain men here at this time. Everybody has his own opinion as to the conditions of the crop and of the market and the effect the war will have on it all, but nobody seems to have confidence enough in his opinion to make it public property. It is generally conceded that it is bound to have far-reaching effects on the market in the United States should the war be a long drawn out affair. Just at present the market is like a fluttering bird hunting for a resting place on a brick wall. Prices flutter first up and then down, but the permanent resting place has not yet been found, and there are few who have confidence in their opinion as to the final outcome. The effect at this time has been to strengthen local prices. Cash wheat today reached its high point, \$1.03, while the lowest ebb was on August 3 when it was \$0.87½. There are some who declare that the effect of the European war must be to bring about and hold higher prices in the United States. Farmers are not selling their crops save where necessity demands ready money. The inclination this year is to hold their crops for later disposal at higher prices; this is especially true of wheat. This will have a tendency to strengthen prices. On the other hand, many European dealers who had purchased supplies fear the risk of shipping and are selling it back to the United States. This would of course have an opposite effect on the market and exporters are bound to feel keenly a situation where this portion of their business is entirely cut off. It is probable that there will be some shipping of wheat to Canada, as the government has held that the neutrality laws are not effective on the Great Lakes, and coal, wheat and other commodities may be shipped to Canada.

Toledo millers have found their export business cut off while they have many orders on hand for flour for England, but are unable to make the shipments. One milling firm had a quantity of flour to be delivered at Havana, Cuba, but the railroads declined to issue bills of lading or touch the cars. A London firm was in the Toledo market last week for a big consignment of hay, but local dealers were unable to close deals owing to the uncertainty of shipping. Most of the wheat which has appeared on the local market is grading pretty well, although there is some smut and considerable rye mixed in it. Just how bad this condition may be, time alone can tell, but it is not thought that a serious situation will be discovered. The wheat receipts during the past week amounted to 245,000 bushels, corn 39,600 bushels, oats 12,800. The week's shipments are as follows: Wheat 24,500 bushels, corn 20,500 bushels, oats 88,300 bushels. Seed prices are holding very firm, as reports indicate that considerable bad seed is coming in, and this, together with the inability to import seed, has a tendency to hold the prices up. Hay prices are also up. Dealers claim that the old crop is entirely cleaned up and the new crop is in urgent demand. New York and Eastern markets are taking all the hay they can obtain, it is reported, and storing it in warehouses in the expectation of making big profits when shipping to Europe is again resumed.

Taken altogether, there is an unsettled condition on the market and it is, in the opinion of many, just a toss up as to what to do. Should the war continue, prices are bound to be strengthened and the United States will profit. Should the war be brought to a speedy close, the effect would of course be somewhat different.

* * *

Fred W. Jaeger, of J. F. Zahm & Co., and Charles S. Burge, president of the S. W. Flower Company, have returned after a three months' tour of Europe. Messrs. Jaeger and Burge, accompanied by their wives, left Toledo May 11 and spent the time visiting the various European countries. They left Liverpool just a couple of hours before war

was declared, receiving the announcement by wireless on board ship.

* * *

Archie Gassaway, secretary of the Produce Exchange, was confined to his home by illness on August 10.

* * *

Robert Hosbury, Ohio state inspector, was a Toledo visitor this week, calling on "Big Chief" Ed Culver.

* * *

Dr. J. W. T. Duvel, technologist, in charge of the office of Grain Standardization at Washington, was a Toledo visitor this week.

* * *

Two hundred farmers and fruit growers in the vicinity of Oak Harbor have organized a co-operative company and incorporated for \$25,000. The concern has taken over the business and elevator of the Oak Harbor Hay & Grain Company. The incorporators are: F. H. Mylander, Peter Gulay, H. F. Peters, William Hyde, Fred W. Zarn and F. H. Surbier.

* * *

The Joseph Dowty farm in St. Mary's County yielded an average oats crop slightly exceeding 62 bushels to the acre.

* * *

County Agent Higgins of Montgomery County is warning farmers to treat all wheat intended for seed this fall for smut before it is used. He points out that several loads of wheat were rejected at the mills this year because of the presence of smut and recommends the following treatment: Use 40 per cent formaldehyde, commercially known as formalin. To treat wheat use one pint or pound of the formalin to 40 gallons of water; sprinkle piles of grain on tight floors or canvas with the solution by means of sprinkler, meanwhile shoveling the grain over so that every kernel is moistened. It will require one gallon of the solution to a bushel of grain. Allow to lie in piles over night, then spread to dry. After treating, handle grain in disinfected bars, mills and drills.

* * *

The nineteen-year-old daughter of Mrs. Elizabeth Schauss, Toledo's foremost suffragist, is known as the youngest suffragist worker in Ohio. She recently carried a suffrage petition into an elevator at Edon, Williams County, Ohio, asking the men for signatures. Laughingly the men refused to sign because women are unable to do men's work and therefore should not be entitled to vote." The ardent young suffragist seized a shovel and for fifteen minutes shoveled oats with the best of them. Every man signed her petition.

* * *

W. C. Lewis, aged 65 years, a prominent grain dealer of Edgerton, Ohio, died recently in a hospital at Minneapolis, where he went several weeks previously to undergo an operation. He is survived by a wife and two daughters, besides a number of brothers and a sister. One of his brothers is Charles T. Lewis of the Minneapolis Chamber of Commerce.

* * *

Shippers throughout this section are worried over the car shortage which shippers of all kinds of materials declare is inevitable. Toledo is already finding instances where not enough cars can be secured and the tie-up a little later on, it is predicted, will be serious. This has been brought on largely by the severe retrenchment policy which has been carried on by the railroads for months past. The extremely heavy crops harvested this season will make this shortage a real hardship. There has been a considerable surplus of idle cars, but it is estimated that it will require 500,000 cars to transport wheat and other agricultural yields. It is also stated on what seems good authority that the supply of cars ready for service will fall far short of this number.

* * *

According to published statements, the wheat crop in Stark County will show an increase of about ten bushels to the acre this year. The normal yield is about fifteen bushels to the acre, while this year's average is twenty-five bushels. The total wheat crop of the county is estimated at 954,000 bushels.

* * *

The July crop report of the state agriculture department was completed a few days ago and the wheat crop for the state is estimated at 25,726,538 bushels. A total of 1,633,431 bushels has been harvested thus far this year.

* * *

Alphonse Mennel, president of the Harter Milling Company, with offices in the Produce Exchange building and mills at Fostoria, Ohio, is taking a more than usual interest in the European war. Forty-four years ago during the Franco-Prussian war, Mr. Mennel was with the French army and was captured at the battle of Sedan. He spent six months in the prison at Magdeburg, Germany. Mr. Mennel's sympathies, of course, lie with the enemies of Germany and he feels confident that the Kaiser will be taught a severe lesson. Said he:

"If Germany does not conquer France in thirty days the Kaiser is lost." Mr. Mennel further said: "All the countries now involved in this war have the benefit of their crops. All of them practically reap winter wheat and the harvest is about the same time as ours. Thus they will not be in danger of suffering unless the war is prolonged. They should get along for at least four months without any outside help. France has next to the largest crop in Europe, having 400,000,000 bushels of wheat. They will not be forced to import much grain. Germany raises mostly rye for bread." Mr. Mennel declares that foodstuffs today in France are 20 per cent higher than 44 years ago.

* * *

Forty-four wagons loaded with wheat raised on the Houston farm in Madison County created considerable interest when they were recently lined up on East High Street, London, while they were photographed by a moving picture camera. The trams passed the camera at a fast trot. The wheat was consigned to the Farrar & Watts elevator. This farm had 20 acres of wheat this year, producing 8,165 bushels.

WHEAT RUST IN THE NORTHWEST

It is a generally acknowledged fact that we cannot hope to wholly escape the destructive effects of rust infection; experiments, however, have shown that much can be done to prevent its damage from becoming so general and so thorough. Proper seed selection and care of the same, and proper soil cultivation and drainage will in a large way overcome this most destructive of all plant diseases and farm troubles. For the season of 1905, various experts placed the loss of the wheat crop of the Northwestern wheat states, Minnesota and the Dakotas, at 30,000,000 bushels.

The black rust at this time is causing much concern in the Northwest. A. C. Johnson, passenger traffic manager of the Northwestern road, gives the trade this view of black rust:

Too little is apparently known of black rust, its origin and its effect to venture a statement based on practical field study. It is a light flakey spore that is harbored in weeds, and at certain times floats with the wind and becomes lodged on growing grain, where it produces effective damage under certain weather condition. When it is effective it is red, not black; when it has spent its force it becomes black. Its effective damage is done when it works on the stalk and eats through to the inner stalk channel and the nourishment leaks through the puncture and deprives the stalk and berry above such puncture necessary support. The result is growth is stopped, the berry shrinks and the stalk dies and the puncture is a black spot on the stalk. If the berry is in the milk stage it will shrink one-half; if more or less advanced the damage is proportional.

There has been one black rust failure in twenty years. There are black rust spores every year which do but little if any damage; they are usually affected enough to turn black, losing their force without penetration, and it is such visible black spots that excite reports. Samples of stalk infected grain where damage has not been done, but where the black spots are very visible, are generally secured by a selection of such unmatured grain, and in a short time after being severed the stalk dries up, the berry shrinks and with the visible black spots it is displayed and reported as damaged by black rust, whereas it would have matured if not severed if there had been no rust puncture.

With reference to usual report it is too early or too late for black rust to damage wheat; if the rust is effective before the stalk is above the shoots damage to the berries is not to a great extent effective and before the stalk is above the shoots it is too early. If the berry is mature to a thick dough stage it is too late. There is one exception to no damage to stalk without punctures. If the rust is so plentiful as to destroy the vitality of the stalk it is to such extent liable to damage.

A railroad official with a gift for figures estimates that the crop this year would require a train 7,000 miles long to transport it to market.

Port Arthur, Ontario, recently launched the largest steamer on the Great Lakes. The first load of the ship was oats of which it carried 585,000 bushels.

The damage from fire in the wheat fields has been very heavy this year. Engine or thresher sparks or smokers' carelessness are the chief contributing causes. Plowed fire guards have saved many fields but some have been destroyed in spite of them.



From Zahm's Red Letter

THE BULL, AS WELL AS THE BEAR, APPARENTLY IS GROPING IN THE DARK

August 15, 1914.

115

ELEVATOR AND GRAIN NEWS



ILLINOIS

McCreery & Son are completing their new elevator at Sweet Water, Ill.

The Farmers' Elevator Company, of Princeton, Ill., has installed new scales.

Toberman Brothers have sold their elevator at Coffeen, Ill., to Joseph Chunley.

The Farmers' Elevator Company, of Gridley, Ill., has increased its capital stock \$7,500.

J. J. Eckman has purchased and will operate the E. A. White Elevator at East Lynn, Ill.

John Heath has been securing subscriptions for the building of a second elevator at White Heath, Ill.

The Brimfield Elevator Company, of Brimfield, Ill., has increased its capital stock from \$10,000 to \$20,000.

Mrs. John Gordon, who for the past year has been conducting a grain office at Litchfield, Ill., has decided to discontinue the business.

Richard Cox has leased his two elevators at Princeville, Ill., to the Farmers' Elevator Company, while the firm has engaged him as manager of the houses.

The Coleta Grain & Lumber Company, of Coleta, Ill., has been incorporated with a capital stock of \$5,000. The incorporators are Ray Rariden, Hugh W. Brown and J. C. Crom.

The Bement Grain Company, of Bement, Ill., has determined to build a new elevator on a site four miles east of Bement on the Wabash Railroad, where a new town will be located and named Concord Siding.

John Wilson has disposed of his interest in the Deininger & Wilson Elevator at Joliet, Ill., to his partner, Henry Deininger, who has taken his two sons into business with him, the firm to be known as Deininger & Sons.

P. K. Willson, of Birkbeck, Ill., and A. A. Delong, of Clinton, Ill., have formed a partnership and will operate the elevators at Birkbeck and Clinton, previously operated by Mr. Willson. Mr. Delong will have charge of the Clinton house.

Farmers of Cincinnati, Sand Prairie and Elm Grove townships, who own an elevator at Meyers Station on the Alton Railway, have decided to build another elevator on the Chicago & Northwestern Railway seven miles south of Pekin, Ill.

The Agnew Farmers' Elevator Company has been organized at Agnew, near Galt, Ill., with a capital stock of \$5,000, to deal in grain, lumber and coal. The incorporators are Charles D. Metznick, William C. McCue, Walter T. Stern, August H. Main and Lord D. Agnew. The company plans to build an elevator.

The old Currey Elevator at Mason City, Ill., built in 1877, has been torn down to make way for other structures. The house has been operated for years by Mr. Currey for the storage and shipment of oats, and was built by John Stewart, one of the leading grain merchants of his time, occupying a site on which a former grain house burned.

F. L. Churchill has sold his elevator at Fairbury, Ill., to the S. C. Bartlett Company, of Peoria, Ill. Mr. Churchill had been engaged in the grain and elevator business at Fairbury for 25 years. The original grain house was constructed in 1865 by Ben Walton and since that time the buildings have been destroyed by fire twice and each time rebuilt.

The Advance Elevator at East St. Louis, Ill., which was destroyed by fire with an estimated loss of \$500,000, will be rebuilt according to an announcement made by the Albers Commission Company, owners of the property. The new house is to be of concrete construction and will cost approximately \$350,000. It will have a capacity of 1,000,000 bushels.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, reports the following changes in the ownership of elevators: The Honefenger Grain Company has succeeded Geo. Ritscher & Son at Owaneco; F. H. Falk has succeeded Wm. Cliggitt at Oswego; L. H. Jones & Co. are the only grain shippers at Centralia, and have stations at Richview, Low Rock and Fountain Bluff; C. F. Scholer has succeeded P. D. Getty & Co. at Farmer City and has stations at DeWitt, Kumler and Fullerton; G. P. Dikeman has succeeded Murray Brothers &

Ward at Rapatee; the Wm. Kaufman Company has succeeded C. E. Babb & Co. at Buckley; DeLong & Willson have succeeded P. K. Willson at Clinton; J. M. Krautz has succeeded H. C. Suttle at Mt. Pulaski; G. W. Bishop & Co. and the J. G. Welton Grain Company are dealing in grain at Palestine, and Chambers & Foote have succeeded the Baldwin Elevator Company at Sadorus, Ill.

The Pekin Farmers' Grain Company, of Pekin, Ill., has increased its capital stock from \$10,000 to \$20,000, and awarded a contract for the building of an elevator, the contract price \$13,500. The structure will be 36x50 feet on the ground and 85 feet high. The equipment will be operated by electricity and arrangements will be made to handle grain by wagon, car or boat.

The Wallace Grain & Supply Company, of Ottawa, Ill., is preparing to rebuild the elevator destroyed by fire on July 24. The directors plan a modern concrete structure of larger capacity than the former house, and a temporary building will be erected immediately to handle this season's crop. The officers of the company are as follows: President, Matthew Gahn; vice-president, T. W. Esmond, and secretary, R. A. Green.

In last month's issue an item concerning the organization of the Fletcher Grain Company at Fletcher, Ill., stated that the company had taken over the elevator of the Hawthorne Grain Company, which had been idle since the failure of the latter company. We have since been informed that the Hawthorne Grain Company has not failed and is operating an elevator at Pontiac, Ill. It discontinued business at Fletcher when it sold its house at that point to A. B. Means in June.

OHIO, INDIANA AND MICHIGAN

W. E. Beagle has succeeded C. E. Emery in the elevator business at Forest, Ohio.

The Rose City Elevator Company, of Rose City, Mich., has increased its capital stock from \$10,000 to \$25,000.

C. H. Harmony has leased the Poling Elevator at Ansonia, Ohio, owned by E. S. Lewis, of Upper Sandusky, Ohio.

The Whittemore Elevator Company, of Whittemore, Mich., has installed a new engine and extensively improved its plant.

Robbers blew open the safe in William Perry's elevator at Magnetic Springs, Ohio, on July 29, and secured about \$50 in cash.

J. P. Barnthouse, of Morral, Ohio, has taken over the elevator plant and grain business of James King at LaRue, Ohio, in exchange for a farm near Morral.

The Farmers' Grain Company, of Laketon, Ind., has awarded a contract for repairs on its elevator to the Burrell Engineering & Construction Company, of Chicago.

A late order has been placed with the Nordyke & Marmon Company, Indianapolis, Ind., for machinery by the Early & Daniel Company, of Cincinnati, Ohio.

J. J. Leas has extensively improved his elevator at West Sonora, Ohio, and a gasoline and kerosene engine has been installed to replace the steam power formerly used.

The Hicksville Grain Company has been incorporated at Hicksville, Ohio, with a capital stock of \$20,000. The incorporators are William Hirzel, Peter Walter, G. F. Henning, Arthur E. Allen and Charles C. Howenstine.

Hiram and Isaac Jones, operating elevators at Attica and Stonebluff, Ind., have purchased the elevator at Williamsport, Ind., which has been operated for several years by the Miller Grain Company. Milton Keister will have charge of the house.

The Helena Co-operative Company, of Helena, Ohio, has filed articles of incorporation with a capital stock of \$20,000, to engage in an elevator business. The incorporators are Fred Rutchen, Jr., E. H. Bradley, F. W. Beatly, C. W. Runduyle and C. A. Lindsey.

The Valparaiso Elevator at Bucyrus, Ohio, has been purchased by Henry D. Miller, of Lykens, Ohio, who took possession of the property last month. The plant was formerly owned by the Valparaiso Elevator Company, of which S. D. Beal is the president. The company operates an elevator at Valparaiso, Ind., but the house at Bucyrus has not been in com-

mission since May, 1913. Mr. Miller is also interested in houses at Bloomville, Republic and Lykens, Ohio.

The Caro Farmers' Elevator Company, of Caro, Mich., has been incorporated with a capital stock of \$40,000. The stockholders are James H. Milliken, Rosco W. Black and James Wilson.

The Tamah Grain Company has been incorporated at Tamah, Ohio, with a capital stock of \$12,000. The incorporators are W. T. Palmer, Mrs. W. T. Palmer, Robert Wagers, Grace Wagers and George Dustman. The company has purchased the elevator formerly operated by Behymer Brothers.

Articles of incorporation have been filed by the Milton Center Grain & Stock Company, of Milton Center, Ohio, capitalized at \$20,000. The incorporators are R. M. Strow, J. M. Durlist, C. F. Lewis, Carl R. Nelson, O. F. Swartz, W. W. Hockman, J. A. Baumgardner, John R. Kieffer, P. Hutchinson and A. N. Longbrake.

SOUTHERN AND SOUTHWESTERN

A new elevator has been completed at Duke, Okla.

W. P. Brown & Co. will rebuild the warehouse at Memphis, Tenn., recently burned.

The Medford Milling Company, of Medford, Okla., has improved its elevator at Renfrow, Okla.

The Graff Milling Company, of Crescent, Okla., has completed a new grain house at Supply, Okla.

The Taylor Grain Company, of Memphis, Tenn., will rebuild the elevator recently burned with a loss of \$25,000.

The elevator of the C. B. Cozart Grain Company at Vici, Okla., has been taken over by the Farmers' Grain & Supply Company.

The office of the Van Dusen Elevator Company at Guthrie, Okla., was broken into on July 31, but not much of value was secured.

S. G. Collins, grain dealer at Milton, Fla., is in the market for a corn shucker and sheller, having a capacity of 100 bushels hourly.

E. P. Burdick, representing the C. B. Cozart Grain Company, at Clovis, N. M., contemplates the building of an elevator and feed mill at that place next year.

The Greenville Mill & Elevator Company, of Greenville, Texas, has filed an amendment providing for the addition of Commerce, Texas, as a place of business.

The safe in the office of the Birmingham Grain Company at Birmingham, Ala., was blown by cracksmen, who secured about \$300 and a thousand dollars worth of checks.

The Nordyke & Marmon Company, of Indianapolis, Ind., recently received an order for machinery from the M. F. Gonzalez Company, grain dealers at Pensacola, Fla.

Fred Cribley has purchased from Jamison & Byers the old mill property at Cleveland, Okla., and the elevator is being reconstructed. It will be covered with galvanized iron.

The Oklahoma City Mill & Elevator Company, of Oklahoma City, Okla., has taken out incorporation papers under the laws of Arkansas and will maintain a branch office at Little Rock, Ark.

The Spartan Grain & Mill Company has been incorporated at Spartanburg, S. C., with a capital stock of \$20,000. The incorporators are W. D. Burnett, C. B. Fretwell and L. A. Phifer.

The Dixie Grain & Hay Company has been incorporated at Nashville, Tenn., with a capital stock of \$15,000. The incorporators are W. H. Worsham, H. B. Worsham, Grover C. Means and O. T. Behne.

W. H. Aspinall & Co., of Weston, W. Va., have been incorporated with a capital stock of \$40,000, to deal in grain and feed. The incorporators are W. M. Aspinall, J. W. Marsh, J. A. Fisher, R. E. McDonald and C. L. McKeown.

The Knight Brothers' Grain Company has completed the erection of its new elevator and mixed feed plant at Dallas, Texas. The plant is located on the Santa Fe Railway and is equipped with the most up-to-date machinery. The storage capacity of the elevator is 70,000 bushels, the hay storage 50 carloads, while the daily milling capacity is seven carloads. Andrew G. Knight and John J. Knight, proprietors of the company, were for many years

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

members of the old firm of G. A. Knight & Sons, also formerly president and vice-president of the Knight-Steger Grain Company, of Dallas.

The Farmers' Gin & Grain Company has been incorporated at Boynton, Okla., with a capital stock of \$10,000. The incorporators are A. C. Trumbo, John H. Mosier and R. A. Patterson, all of Muskogee, Okla. The new firm has purchased the business of P. B. Wolfinger.

The Creek Grain Company, of Okmulgee, Okla., has remodeled its elevator throughout and an addition has been built to be used as a grain and flour storage room. An iron-clad building has been erected for hay and grain storage, and a corn meal mill has been installed.

According to a statement made by R. V. Taylor, vice-president and general manager of the Mobile & Ohio Railroad, the company contemplates rehabilitating the grain elevator at Mobile, Ala., at an approximate cost of \$16,000. The house has not been in operation for six or seven years.

The White-Lockstone Grain Company has been organized at Wheatland, Okla., to engage in business at Weatherford, Okla., with a capital stock of \$10,000. The incorporators are Harvey White, president; Ralph Lockstone, vice-president, and J. P. White, treasurer and manager. The company is building a 15,000-bushel elevator.

EASTERN

The Bath Grain Company, of Bath, Maine, has acquired property on a wharf adjoining the Maine Central Railroad on which it will erect a building.

The Ralston Purina Company, of St. Louis, Mo., recently awarded a contract for the erection of an elevator and a mill at Prenatt Street and the "Nickel Plate" Railroad, Buffalo, N. Y., at a cost of \$100,000. The building will be of concrete construction.

The Merchants Grain Company, Inc., of Auburn, N. Y., has been incorporated with a capital stock of \$10,000, to deal in grain, hay, etc. The incorporators are J. M. Keely, of Brooklyn, N. Y.; G. M. Blanchfield, of New York, and G. W. Bradicich, of Union Course, N. Y.

The City Council of Buffalo, N. Y., has been asked by men connected with grain and marine interests to act favorably upon a resolution providing that \$13,500 be expended for the removal of obstructions from the seawall strip to permit the laying of a switch necessary for a proposed \$500,000 elevator to be erected on property of the Buffalo Harbor Land Company.

WESTERN

J. E. Cox & Co. are building a new elevator at Roy, Mont.

A farmers' elevator will be erected at Homestead, Mont.

The Farmers' Elevator Company has closed its house at Buffalo, Mont.

The Beckwith Mercantile Company is building an elevator at Ravalli, Mont.

A movement has been under way for the erection of a farmers' elevator at Ulm, Mont.

It is reported that an independent elevator will be erected at Plevna, Mont., this fall.

The Montana Central Elevator Company is building a new elevator at Harrison, Mont.

The Griffith Union Grain & Trading Company is building a new elevator at Ruff, Wash.

The International Elevator Company is building elevators at Flaxville and Scobey, Mont.

Thos. Gribbin, of Lanesboro, Minn., has purchased an elevator at Three Forks, Mont.

P. A. Schneckloth has purchased the Hawkeye Elevator Company's plant at Clydepark, Mont.

A farmers' elevator company has been organized at Antelope, Mont., to build a new grain house.

The Cascade Milling Company, of Great Falls, Mont., may erect an elevator at Whitefish, Mont.

The Occident Elevator Company, of Minneapolis, Minn., will erect an elevator at Shepard (no P. O.), Mont.

W. T. Giese, of Doland, S. D., has removed to Wilsall, Mont., where he has purchased an elevator.

B. F. Antonson of Ambrose, N. D., and others are building a 35,000-bushel elevator at Denton, Mont.

Cowan & Son are building a 30,000-bushel elevator at Box Elder, Mont., and its equipment includes a feed grinder and a grain cleaning machine.

The T. W. Busby Grain Company has been organized at Oakesdale, Wash., and has secured leases on six warehouses which it will operate in Oakesdale and vicinity. They are located at Oakesdale, Warner, Seltice, Farmington and Hayfield Siding. T. W. Busby, who has been buyer for the Kerr-Gifford

Grain Company for several years, will manage the business.

A new elevator has been completed at McCabe, Mont., to replace the house recently destroyed by fire.

A 30,000-bushel elevator will be erected at Geraldine, Mont., by the State Elevator Company, of Cascade, Mont.

A. B. Mitchell is one of a company of farmers that has purchased the plant of the Pinebluff Elevator Company at Pinebluff, Wyo.

The McCaul-Webster Elevator Company has decided to build an elevator at Judith Gap, Mont., having a capacity of 20,000 bushels.

The State Elevator Company, of Cascade, Mont., has secured a site at Ross Fork (mail Lewistown), Mont., on which it will build an elevator.

The elevators at Saco and Beaverton, Mont., have been taken over by the St. Anthony Elevator Company from the Cullen Elevator Company.

The Independent Warehouse & Milling Company, of Wasco, Ore., has purchased the warehouse of the Kerr-Gifford Company at Hay Canyon, Ore.

The elevator at Platteville, Colo., has been enlarged and a 32-horsepower engine has been installed to replace 16-horsepower equipment.

The Musselshell Valley Grain Company has completed a grain house at Ingomar, Mont., which will be replaced with a modern elevator next year.

The J. Alexander Company, of Lewiston, Idaho, will erect a grain warehouse in Tammany Hollow, near that place, having a capacity of 200,000 sacks.

The Farmers' Grain Company, recently incorporated at Hedgesville, Mont., has purchased the elevator of the Rocky Mountain Elevator Company at that place.

The State Elevator Company, of Cascade, Mont., will erect an elevator at Hauck, Mont., on the Billings-Great Falls line of the Chicago, Burlington & Quincy Railroad.

An addition has been constructed to the Farmers' Elevator at Moccasin, Mont., which will be utilized as a warehouse for flour and feed and in which a feed grinder will be installed.

Three new elevators are to be erected at Great Falls, Mont., one for the McCaul-Webster Company, one for the State Elevator Company and the third for the Farmers' Elevator Company.

Two new elevators will be erected at Franklin, Mont., one for the State Elevator Company and the other for the Rocky Mountain Elevator Company, subsidiary to the Royal Milling Company.

The stockholders of the Rathdrum Grain & Supply Company, Rathdrum, Idaho, have elected the following directors: William Boekel, G. A. Laird, Henry Meyer, R. F. Schaefer and August Neustel.

An elevator will be erected in connection with the flouring mill at Steamboat Springs, Colo., which has been taken over by Ora Haley, of Denver, and John Stukey and E. H. Zimmerman, of Steamboat Springs.

The Chehalis Grain Company, of Chehalis, Wash., has purchased the business of the Chehalis Produce Company, dealers in grain and feed. The Chehalis Grain Company is owned by A. E. Pollom and A. A. Broderick.

The Farmers' Elevator Company has awarded a contract for the building of an annex to its elevator at Culbertson, Mont., providing additional storage room for 10,000 bushels of grain. A feed mill will be installed in the new structure.

The Farmers' Elevator Company, of Scobey, Mont., has been incorporated with a capital stock of \$15,000. The directors are Frank Hughes, Theodore Colby and S. Burgess, of East Scobey, and J. C. Trimmons and G. N. Robinson, of Scobey.

The Sperry Flour Company, operating a number of flour mills on the Pacific Coast, has prepared to erect a large elevator at Fresno, Cal. According to the plans, the structure will be 63x38 feet on the ground and 105 feet high, and of frame construction covered with a metal siding. The new plant will represent an expenditure of \$15,000 and is the first elevator to be erected in Fresno.

The Weston Warehouse Company, of Weston, Ore., has been incorporated with a capital stock of \$5,000, and will take over the Kerr-Gifford warehouses at Weston and Downing stations. Frank Price, former agent for the Kerr-Gifford people, has been elected manager, and the company has elected the following officers: Sim J. Culley, president; G. W. Winn, secretary, and J. M. Banister, treasurer.

The annual meeting of the Waterville Union Grain Company, Waterville, Wash., was held recently and the annual report showed assets of \$48,000 with a slight surplus, while its business for the year amounted to \$750,000. The following officers were elected: President, J. M. Minnick, of Waterville; vice-president, T. S. Hedges, of Alsttown; secretary-treasurer-manager, J. M. Friel,

Waterville. The company operates warehouses at Waterville, Alsttown, Douglas, Withrow and Saplee, Wash., and elevators at Withrow and Saplee.

L. W. Robinson, of Nez Perce, Idaho, has taken over the line of warehouses formerly operated on the Clearwater Short Line and the Camas Prairie Line in Idaho by the Kerr-Gifford Company, with the exception of the house at Vollmer, Idaho. As part payment Mr. Robinson turned over the Nez Perce Roller Feed Mill at Bellingham, Wash. Mr. Robinson is operating the houses at Greer, Orofino, Summitt, Cottonwood, and Lewiston. Warehouses at Fenn and Grangeville, secured by Mr. Robinson, are under lease but will be operated by the new owner when the leases expire.

IOWA

The elevator at McIntire, Iowa, has been repaired.

A new elevator has been completed at Rolfe, Iowa.

W. F. Jordan has taken over the elevator at Bailey, Iowa.

A Mr. Malcolm has purchased the Western Elevator at Oto, Iowa.

O. M. Jordan has completed a new elevator at Garden Grove, Iowa.

The elevator at Lost Nation, Iowa, has been placed on a new foundation.

The Neola Elevator Company has re-opened its elevator at Mapleton, Iowa.

Emil Miller has purchased the elevator of Loeltz Brothers at Earling, Iowa.

The E. Rothschild Company has built an addition to its elevator at Brayton, Iowa.

D. C. Reynolds has purchased the elevator of Turner Brothers at Elliott, Iowa.

Burke Brothers & Marn have extensively improved their elevator at Ute, Iowa.

The Peters Elevator at Rock Rapids, Iowa, has been remodeled and the cupola enlarged.

E. E. Stedman has awarded a contract for the building of an elevator at Newhall, Iowa.

The Farmers' Co-operative Company, of Sheldon, Iowa, is installing extensive improvements.

A contract has been awarded for the construction of a 25,000-bushel elevator at Oskaloosa, Iowa.

Farmers in the vicinity of Whittemore, Iowa, have completed their new 35,000-bushel elevator.

A contract has been awarded by B. A. Lockwood for the construction of an elevator at Ankeny, Iowa.

The Bailey Elevator at McIntire, Iowa, has been leased by the Cargill Elevator Company for five years.

D. C. Mossman & Co. have purchased the business of the Morningside Elevator Company at Sioux City, Iowa.

The Thorpe Elevator Company, of Hinton, Iowa, has opened its house for business with J. J. Harvey as manager.

The King-Read Company, of Montezuma, Iowa, has converted a garage on its grounds into a grain office and installed wagon scales.

The Farmers' Mutual Elevator Company, of Bennett, Iowa, has built coal sheds for the handling of coal in addition to its grain business.

C. P. Whitney, who has been engaged in the grain and feed business at Keosauqua, Iowa, has sold his warehouse and business to E. E. Van Zant.

A new steel covered elevator with a capacity of 40,000 bushels will be erected at Granville, Iowa, following the dismantling of the old Farmers' Elevator.

The Flanley Grain Company has been incorporated at Sioux City, Iowa, with a capital stock of \$50,000. C. C. Flanley is president and C. W. Adams is manager.

A farmers' co-operative company has been organized at Dennison, Iowa, and an elevator will be erected on a site adjoining the Chicago & Northwestern Railroad.

DeWolf & Wells, operating grain houses in the Northwest, will dispose of their elevators, it is said, and engage in banking. Their grain house at Spencer, Iowa, will continue operations this fall as previously.

The Farmers' Elevator Company of Lynn Grove, Iowa, is adding to its present storage by the construction of a 10,000-bushel concrete tank. The work is being done by the Burrell Engineering & Construction Company.

The Farmers' Elevator Company, of Kamrar, Iowa, has expended \$5,500 on the work of remodeling and enlarging its house. An addition has been erected and a new 20-horsepower gasoline engine has been installed, also a corn sheller and cleaner.

H. J. Hutton, president of the Mystic Milling Company, Sioux City, Iowa, has announced that a new concrete elevator with a capacity of 500,000 bushels will be erected to replace the Terminal Elevator recently destroyed by fire. The burned

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

117

structure was formerly owned by the Sioux City Terminal Elevator Company but recently purchased by the Mystic Milling Company. A building company will be organized to erect the house.

The Farmers' Co-operative Grain & Coal Company has been organized at Vinton, Iowa, with a capital stock of \$15,000. The officers are as follows: President, D. C. Knupp; vice-president, W. F. Burke; secretary, S. W. Cook, and treasurer, U. S. Goodhue.

MISSOURI, KANSAS AND NEBRASKA

F. A. Roehl has sold his elevator at Waverly, Neb., to J. M. Adams.

L. A. Hanks has disposed of his elevator and lumber business at Cook, Neb.

A new elevator at Ogden, Kan., is handling the wheat crop in that vicinity.

The Meade Grain Company, of Fort Scott, Kan., has succeeded the Walton Grain Company.

Elevators at Wheeler and St. Francis, Kan., have been taken over by the Farmers' Equity Union.

The Farmers' Elevator Company, of Assaria, Kan., has been incorporated with a capital stock of \$6,000.

Chas. Eyler has sold his elevator at Ponca, Neb., to O. I. Newton, and purchased a feed store at that place.

Frank Hill has purchased the Rock Island Elevator at Canton, Kan., from the Canton Milling Company.

The Sbannon Grain Company has opened its elevator at Moorefield, Neb., with James Pearson as manager.

John Lynds has sold his elevators at Highland, Marcel and Ratcliffe, Kan., to A. L. Wyncoop, of Highland.

The Farmers' Grain & Mercantile Company, of Adams, Kan., has been incorporated with a capital stock of \$2,500.

The Brand-Dunwoody Milling Company has completed a new elevator at Hallowell, Kan., and Harvey Land is the buyer.

The Glenwood Grange, of Glenwood Park, near Kearney, Neb., has leased the Trans-Mississippi Elevator for the season.

Colburn Brothers have removed their elevator at McPherson, Kan., from its former location at that place to a site on a railroad switch.

The McCaull Elevator at Fordyce, Neb., will be operated this year under the management of I. G. Corey, formerly of Hartington, Neb.

The St. Louis Grain Club contemplates building an elevator at St. Louis, Mo., having a capacity of 1,000,000 bushels and costing \$350,000.

The Allen-Meade Grain Company will operate the Kemper Elevator at Coffeyville, Kan., this season. A large electric motor has been installed in the house.

The Kansas Flour Mill Company, of Topeka, Kan., has filed a \$100,000 bond with the secretary of state to qualify its elevators throughout the state as public warehouses.

Copenhaver & Dillon have sold their grain, hay and produce business at Lawrence, Kan., to Junius Underwood, and the new firm will operate as J. Underwood & Son, Wm. Underwood to be in active charge of the business.

The Monroe Coal & Grain Company, of Monroe City, Mo., is erecting a 10,000-bushel elevator to replace the building recently lost by fire. The contract was awarded to the Burrell Engineering & Construction Company.

The Farmers' Union, of Leigh, Neb., has purchased the elevator of the Crowell Lumber & Grain Company at that place. The plant will be enlarged and lumber and building material will be added to the stock. The consideration was \$5,600.

The Farmers' Elevator & Lumber Company has been incorporated at Prosser, Neb., with a capital stock of \$50,000. The incorporators are Henry Augustin, Simon Struss, F. R. Gasch, Tbos. Kennedy, Jacob Ruhter, J. F. Moore and Lee W. Ramsey.

To capitalize its surplus, the Cavers Elevator Company, of Omaha, Neb., has increased its capital stock from \$50,000 to \$100,000. The firm name has also been changed to the Cavers-Sturtevant Company, the name of C. D. Sturtevant, one of the firm members, having been added.

When the new large addition to the elevator plant of the Kansas-Missouri Elevator Company, subsidiary to the Missouri Pacific-Iron Mountain Railroad, at Kansas City, is complete, there will be 40 additional concrete storage bins, 84 feet deep and 22 feet in diameter, each with a capacity of 25,000 bushels, making a total of 1,000,000 bushels and 19 smaller bins, each with a capacity of 7,000 bushels or a total of 133,000 bushels. The smaller bins are of the interstice type. The original elevator consisted of 10 circular concrete tanks with a capacity of 80,000 bushels each or 800,000 bushels in all, while the elevator building proper has a capacity of 200,000

bushels, making the total capacity of the plant 1,000,000 bushels. The completed elevator will have a total of 69 units of storage space, with a capacity of 2,133,000 bushels.

The Alley Grain Company, of Mercer, Mo., has placed its contract with the Burrell Engineering & Construction Company for a 10,000-bushel wood-constructed elevator.

The Burrell Engineering & Construction Company has been awarded the contract of the Chicago, Burlington & Quincy Railroad for a new 200,000-bushel elevator at St. Joseph, Mo., and will also remodel the old working house. The piling is now in and the foundation is being laid. The work is to be completed by October 1.

Secretary E. J. Smiley, of the Kansas Grain Dealers' Association, has advised us of the following changes in the ownership of elevators: L. G. Mansolf is out of business at Albert; the Farmers' Grain, Livestock & Supply Company has been succeeded by the Farmers' Elevator Company at Atwood; O. C. Wells has been succeeded by J. E. Mills at Barrett; M. O. Koesling has been succeeded by E. W. Koesling at Bloomington; C. N. Hane has been succeeded by the Broughton Grain Company at Broughton; the Bucyrus Lumber & Grain Company has been succeeded by the Harris & Anderson Lumber Company at Bucyrus; the Cheney Grain & Elevator Company has been succeeded by the Farmers' Elevator Company at Cheney; the Delphos Co-operative Association has been succeeded by the Farmers' Elevator Company at Delphos; Wm. Sandow has been succeeded by A. F. Sandow at Dillon; Ed Boyd has been succeeded by Sharp & Jenkins and N. W. Nelson at Dwight; the Elgin-Kansas Supply Company has been succeeded by R. M. Dakin at Elgin; W. A. Adams has been succeeded by F. A. Adams at Ewell; the Germantown Grain & Supply Company has been succeeded by the Farmers' Elevator Company at Germantown; Ulrich Bros. have been succeeded by the Hamilton Grain Company at Hamilton; A. L. Wynkoop has been succeeded by John H. Lynds at Highland; the Holyrood Grain & Supply Company has been succeeded by the Farmers' Elevator Company at Holyrood; the Star Elevator Company has been succeeded by George Hoffman at Little River; the Farmers' Elevator Company has been succeeded by the Mt. Hope Elevator Company at Mt. Hope; the Ogallala Elevator Company has been succeeded by the Farmers' Elevator Company at Ogallala; J. O. Moffett & Co. have been succeeded by Jannette & Moffett at Peabody; the Osborne County Farmers' Union has been succeeded by W. C. Smith at Portis; Collingwood & Krehbiel have been succeeded by the Collingwood & Demerett Grain Company at Pretty Prairie; L. H. Hale has been succeeded by the Stevens-Scott Grain Company at Protection; the Staley Grain Company has been succeeded by J. W. Pinney & Co. at Republic City; the Norris Elevator Company has been succeeded by the Morris Elevator Company at Rozel; Joe Brown has been succeeded by J. W. Pinney & Co. at Scandia; M. Boswell is out of business at Severance; the Farmers' Union Elevator Company has been succeeded by the Johnson Thierolt Mercantile Company at Solomon Rapids; the Farmers' Co-operative Grain & Livestock Association has been succeeded by the Farmers' Elevator Company at Talmage; the Kinkhead Grain Company has been succeeded by Kent & Kinkead at Troy; the Vineland Co-operative Company has been succeeded by the Star Grain & Lumber Company at Vineland; Thompson & Robinson have been succeeded by H. S. Robinson at Wakarusa; G. G. Weichen has been succeeded by the Farmers' Elevator Company at White Cloud; the Wilmore Grain & Mercantile Company has been succeeded by the Farmers' Grain & Mercantile Company at Wilmore; E. Elwood, Jr., has been succeeded by E. L. Wood at Windom.

The following changes have occurred among Nebraska firms that are members of the Kansas Grain Dealers' Association: L. L. Coryell has succeeded Sorenson & Coryell at Auburn; Nutzman & Marquardt have succeeded the Marquardt Elevator Company at Avoca; the Farmers' Co-operative Association has succeeded E. E. Smith at Bartley; C. O. Garrison has succeeded N. A. Alexander at Beatrice; Ord & Goodwin have succeeded Goodwin & Co. at Bracken (South Auburn P. O.); the Farmers' Elevator Company has succeeded O. F. Hines at Ceresco; P. K. Winther has succeeded the Adam Daseo Grain Company at Eustis; Groves & Cramer have succeeded the Firth Grain & Coal Company at Firth; Riley Bros. have succeeded E. G. Scoville, Wm. Burke has succeeded the Acme Mill & Elevator Company and Burke & Mullen have succeeded P. J. Mullen at Friend; the Hebron Grain Company has succeeded Wm. Van Buren & Son at Gladstone; B. F. Morehouse has succeeded the Gresham Grain Company at Gresham; the Farmers' Elevator Company has succeeded the Manley Co-operative Grain

Association at Manley; P. H. Gupton has succeeded the Farmers' Equity Union at Oxford; the Duff Grain Company has succeeded Scott Bennett at Red Willow; John O'Donnell & Son have succeeded the O'Donnell Grain Company at Stratton; the O. M. Kellogg Grain Company has succeeded the Trenton Equity Exchange at Trenton; the Farmers' Grain & Supply Company has succeeded the W. E. Samuelson Grain Company at Trumbell; Wilson & Son have succeeded F. C. Wilson at Walton; F. A. Roehl has succeeded J. N. Adams at Waverly; Black Brothers have succeeded the Farmers' Elevator Company at Western; the Wymore Grain Company has succeeded the Farmers' Grain, Lumber & Coal Company at Wymore.

THE DAKOTAS

The elevator at Plana, S. D., has been repaired. A new elevator is being completed at Leola, S. D. A. J. Miller has improved his elevator at Minot, N. D.

The Federal Elevator at Portland, N. D., has been repaired.

Farmers in the neighborhood of Trenton, N. D., will build an elevator.

Gunder Olson and others are completing an elevator at Alexander, N. D.

The Forbes Equity Exchange, Forbes, N. D., has rented the Cargill elevator.

The Amenia Elevator Company has repaired its elevator at McArthur, N. D.

F. Beissbarth is building an elevator at Harlow (Minnewaukau P. O.), N. D.

Ostroost Brothers have sold their elevator at Bryant, S. D., to E. F. Van Schoiack.

The Farmers' Equity Exchange, of Bucyrus, N. D., will build a 30,000-bushel elevator.

Kuroki and Antler, N. D., are each seeking the building of a farmers' elevator this fall.

The Great Western Elevator Company has repaired its grain house at Sheldon, N. D.

The five elevators at Ipswich, S. D., have been rebuilt and refurbished for the new grain crop.

The Farmers' Elevator Company is building a new elevator at Rawson, near Alexander, N. D.

Martin Johnson and Ben A. Songstegard have purchased the Turner Elevator at Sisseton, S. D.

Wm. Roberts has disposed of a half interest in his elevator at Langford, S. D., to Jacob Palmquist.

A. N. Sarbo, of Fortuna, N. D., has purchased the Winter-Truesdell & Ames Elevator at Crosby, N. D.

The Ferney Farmers' Elevator Company, of Ferney, S. D., has installed a set of automatic scales.

T. L. Simmons has prepared to rebuild the elevator at Foxholm, N. D., recently destroyed by fire.

The Farmers' Elevator Company has rented the North Dakota Grain Company's elevator at Stirum, N. D.

An addition has been constructed to the Atlas Elevator at Oakes, N. D., for the accommodation of flour.

Aug. E. Johnson and Karl Klein have disposed of their elevator at Baldwin, N. D., to a company of farmers.

The Farmers' Elevator Company, of Mooreton, N. D., has increased its capital stock and will enlarge its plant.

The Farmers' Elevator Company, of Burbank, S. D., has installed a new gasoline engine and a gasoline tank.

N. J. Cruden and others of La Moure, N. D., have sold the Farmers' Elevator at Verona, N. D., to Robert Freeman.

The Woodworth Elevator Company, of Minneapolis, Minn., contemplates building an elevator at Clementsville, N. D.

The Osborne-McMillan Elevator Company will rebuild the elevator at Kenmare, N. D., destroyed by fire several weeks ago.

Otto Schulz is now the sole owner of the elevator at Minden, near Washburn, N. D., formerly owned by Schulz & Eichhorst.

The Wing Farmers' Co-operative Association has taken over the elevator and coal sheds of Davis & Wilkinson at Wing, N. D.

The Great Western Grain Company is building an addition to its elevator at Mobridge, S. D., to be used for coal and feed storage.

The Farmers' Union Elevator Company, Hazelton, N. D., of which Frank Goughnor is president, will build a 40,000-bushel elevator.

T. Graf, George Wentz and Fred Wentz have purchased the Farmers' Elevator at Streeter, N. D., from H. Kraft and E. H. Pfninger.

The Kindred Farmers' Elevator Company has been incorporated at Kindred, N. D., with a capital stock of \$8,000 and the following incorporators: Elling Severson, Max H. Strehlow, Christ Owen, T.

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

Simon, Nels C. Brakke, S. E. Ulsaker and O. P. Dahlens.

The Farmers' Elevator Company at Henry, S. D., has completed a new elevator and distributed more than \$4,000 dividends to its stockholders.

It is reported that the Woodworth Elevator Company, of Minneapolis, Minn., will erect an elevator at Windsor, N. D., on the Northern Pacific right-of-way.

The Grant Elevator Company, of Rugby, N. D., will build an elevator on a site between Rugby and Barton, N. D., on a siding of the Great Northern Railroad.

The Burt Equity Exchange, of Burt, N. D., is incorporated with a capital stock of \$5,000. The incorporators are J. C. Schleicher, J. A. Sullivan and Wm. Himes.

L. J. Gjere, owner of the Cando Flouring Mills, Cando, N. D., is building 50,000 bushels' additional storage capacity, which will give him elevator capacity of 100,000 bushels.

The Farmers' Elevator Company, of Williston, N. D., has been incorporated with a capital stock of \$12,000. The incorporators are W. W. Wilde, W. W. Keltner and Gene E. Howard.

The Brisbane Co-operative Equity Exchange, of Brisbane, N. D., has been incorporated with a capital stock of \$5,000. The incorporators are W. B. Noyes, T. A. Roberts and John Vetter.

The Farmers' Elevator Company, recently incorporated at Roseholz (R. F. D. from Crawford), N. D., has taken over the elevator at that place formerly owned by D. L. Quinlin and O. I. Sethre.

The Mott Equity Exchange has been organized at Mott, N. D., with a capital stock of \$35,000. The incorporators are O. H. Opland, F. D. Bundy, James Bannon, George Kline and L. F. Hoffman.

The Anderson Elevator at Clark, S. D., has been repaired and rebuilt, while the Atlas Elevator at that place has been improved and a coal shed has been erected in connection with the house.

The directors of the Farmers' Union Elevator & Mercantile Company, of Regan, N. D., have awarded a contract for the building of an elevator to be completed about the middle of September.

Articles of incorporation have been filed by the Farmers' Grain Company, of Goldenvalley, N. D., capitalized at \$25,000. The incorporators are David Juzeler, Gottlieb Klaus, Jr., and Chas. Scharf.

The Reeder Co-Operative Equity Exchange was recently incorporated at Reeder, N. D., with a capital stock of \$10,000. The incorporators are H. O. Eratsberg, Carl O. Hagen and Ole Amundson.

The Haynes Equity Union Exchange, of Haynes, N. D., has been incorporated with a capital stock of \$5,000. The incorporators are Geo. D. Lewis, H. A. Preston and A. J. Fordahl, all of Hettinger, N. D.

A charter has been granted the Newark Farmers' Elevator Company, of Newark, S. D., capitalized at \$25,000. The incorporators are W. C. Bailey, A. G. Hathaway, James E. Mee, C. A. Marman and others.

Articles of incorporation have been filed for the Frankfort Elevator Company, of Frankfort, S. D., capitalized at \$10,000. The incorporators are C. J. Boub, H. H. Motley, W. J. Jones, J. T. Luxton and others.

The Rounseville & Doty Company, of Splritwood, N. D., is building a new 30,000-bushel elevator at Johnson's spur, two miles north of the main line of the Northern Pacific, between Clementsville and the railroad.

The Farmers' Equity Union, recently organized in the vicinity of Petrel, N. D., has been negotiating for the purchase of the Farmers' Elevator at that place, owned and operated by F. A. Finch, of Lemmon.

The Farmers' Grain Association, of White Earth, N. D., has been incorporated with a capital stock of \$15,000. The incorporators are Thos. Haustveit, H. C. Thronson, of White Earth, and Andrew Johnson, of Battleview.

The Halliday Farmers' Elevator Company has been incorporated at Halliday, N. D., with a capital stock of \$10,000 by J. B. Dickson, O. Lingenfelter and Ole Christensen.

The Abercrombie Mill, Grain & Electric Company has been incorporated at Abercrombie, N. D., with a capital stock of \$15,000. The incorporators are C. W. Westerson, C. A. Myron and C. B. Gray.

A charter has been granted to the Farmers' Elevator Company, of Trenton, N. D., capitalized at \$6,000. The incorporators are W. W. Wilde and Frank Voll, of Williston, N. D., and J. A. Cooper, of Williston, N. D.

The new Farmers' Elevator at Edinburg, N. D., completed last month, has a capacity of 45,000 bushels. The house is iron clad and rests on a concrete foundation and the plant includes a brick office and engine house with an additional directors' and stockholders' room. The elevator contains 16 hopper-bottomed bins, two legs, a manlift and an auto-

matic scale. The cost of the house was approximately \$10,000.

The Grace City Co-operative Elevator Association, of Grace City, N. D., has been incorporated with a capital stock of \$50,000. The incorporators are John Topp, John J. Arrestad and O. T. Myer.

The Farmers' Shipping & Supply Company has been incorporated at Edmore, N. D., with a capital stock of \$15,000. The incorporators are A. J. Hammer, of Edmore; Martin Viger, of Fairdale, and Ole Sampson, of Lawton.

The Bremen Equity Elevator Company, of Bremen, N. D., has been incorporated with a capital stock of \$12,000. The incorporators are A. T. Sylling, of Sheyenne, N. D.; Wm. R. Hart, of New Rockford, N. D., and O. H. Olson, of New Rockford.

Articles of incorporation have been filed by the Continental Grain Company, of Aberdeen, S. D., and Edgeley, N. D. The capital stock is \$250,000 and the incorporators are I. C. Doane and W. H. Murfin, of Edgeley, and W. G. Eakins, of Aberdeen.

The Star Elevator Company, of Jamestown, N. D., has made arrangements to build a new 40,000-bushel elevator at Klose's Spur on the Midland Continental Railway, about seven miles south of Jamestown. The contract calls for completion by September 1.

Articles of incorporation have been filed by the Bowdle Farmers' Union Equity Company, of Bowdle, S. D., to handle grain and merchandise. The capital stock is \$25,000, and among the incorporators are William Houpt, Christian Mueller and Gottlieb Goettling.

The Farmers' Elevator Company of Brookings, S. D., held its annual meeting last month when the following officers were elected: President, O. J. Otterness; vice-president, A. J. Bortnem; treasurer, G. F. Knappen; secretary, G. F. Hepner, and manager, W. L. Paul.

The Robinson Elevator Company, of Minot, N. D., has purchased the Acme Elevator at that place and the house has been remodeled, giving the firm additional storage capacity of 17,000 bushels. The Robinson Elevator has also been remodeled and new machinery installed.

A number of improvements have been made in the elevator at Gwinner, N. D., recently purchased by the new Farmers' Elevator Company. The office has been enlarged by the building of an addition, while a manlift, gasoline engine and cleaner have been installed in the house.

John H. Selmer, Frank S. Bramble and A. T. Hopkins, of Watertown, S. D., have taken over the elevator property of the G. W. Van Dusen Company and will operate under the name of the Selmer Fuel & Grain Company, which has been incorporated with a capital stock of \$25,000.

The Minnekota Elevator Company has wrecked its elevator at Sawyer, N. D., the contract having been awarded to T. E. Ibberson, of Minneapolis, Minn., and the material will be removed to Glenfield, N. D., where a new house is being constructed on the Great Northern Railroad.

The Equity Elevator & Trading Company, of Whitman, N. D., has been incorporated with a capital stock of \$25,000 by Frank J. Ponzor and Albert Kouba, of Lankin, and K. L. Nelson, of Brocket, N. D. The company has taken over the elevator formerly owned by Lamb Brothers.

Articles of incorporation have been filed by the Lemmon Equity Exchange, of Lemmon, S. D., capitalized at \$4,000, to handle grain and produce. The incorporators are Leon A. Potter, Carl G. Schneberger, Harley Jennings, W. S. Duell, of Lemmon, and Edmund Ward, of Thunder Butte.

An organization called the Equity Elevator Company has been formed at Genoa (mail Surrey), N. D., by farmers in that community, and the board of directors includes the following: George Selvig, Gunders Skaleland, Will Megie, Halvor Finseth, Knute Stelsberg, Jay Morris and O. L. Ness. They have been negotiating for the purchase of the Ray & Chaplin elevator at that place.

Farmers in the neighborhood of Flasher, N. D., have successfully completed an organization to be known as the Flasher Equity Exchange, and have taken over the new elevator of the Flasher Grain Company, the consideration, \$10,000. The house was built last year and has a capacity of 40,000 bushels. The officers of the new company are as follows: President, I. M. Hasson; vice-president, E. J. Sawtell, and secretary-treasurer, C. W. Peterson. The capital stock is \$15,000.

The F. M. Tusia Grain Company recently completed its new elevator at Egan, S. D., replacing two old elevators built in 1879. The new house is 28x35 feet on the ground and 75 feet high with a large basement which houses the pit, an automatic scale and three electric motors having 25 horsepower. The first floor contains two legs, a grain cleaner, a scale and a feed mill. The house contains 13 bins with a capacity of 30,000 bushels, while adjoining it on one side is a commodious flour and feed house and on the other side an office structure, all of the

buildings clad in sheet steel. The company is handling all kinds of grain, flour, feed, oil meal and salt.

MINNESOTA AND WISCONSIN

A. G. Olson has purchased the McMichael Elevator at Preston, Minn.

A. G. Lungren, of Jud, N. D., has leased an elevator at Borup, Minn.

The Farmers' Elevator Company is completing its new house at Welcome, Minn.

A new elevator is under course of construction at Kinbrae, Minn., for a Mr. Skewis.

The Farmers' Elevator Company, of Blue Earth, Minn., has completed its new house.

The Duluth Elevator Company is building a 40,000-bushel elevator at Barnesville, Minn.

The Cargill Elevator Company has leased the Farmers' Elevator at Eden Valley, Minn.

The Farmers' Elevator at Luverne, Minn., was closed several days last month for repairs.

The work of overhauling and repairing the elevator at Shelly, Minn., has been completed.

The Green Bay Elevator Company, of Green Bay, Wis., has leased the elevator at Blackcreek, Wis.

E. L. Van Alstyne, of Glenbeulah, Wis., has purchased Laun Brothers' elevator at Sheboygan, Wis.

W. W. Fletcher has disposed of his elevator at Pipestone, Minn., to B. F. Veach of Twin Valley, Minn.

The Stedman Elevator Company, of Aldrich, Minn., is building a 2,000-bushel addition to its elevator.

A 20,000-bushel annex has been constructed in connection with the Farmers' Elevator at Campbell, Minn.

Farmers around Morton, Minn., are said to be making an effort to organize a co-operative elevator company.

The new 40,000-bushel elevator of the Farmers' Elevator Company at Brewster, Minn., has been completed.

The Farmers' Elevator Company, of Willmar, Minn., has remodeled and enlarged its elevator at a cost of \$6,000.

The Winter-Ames Elevator at Holloway, Minn., has been purchased by C. M. Jorgeson, recently of Wilmot, S. D.

The Farmers' Elevator at Owatonna, Minn., has been overhauled and remodeled and a new coal shed has been built.

The Prescott Equity Exchange, of Prescott, Wis., has taken over the grain business of the M. T. Dill Grain Company.

The Jeffers Farmers' Elevator Company, of Jeffers, Minn., will build an addition to its elevator, doubling its capacity.

C. E. Peterson has taken over the house at Winthrop, Minn., formerly owned by the C. A. Malmquist Elevator Company.

F. C. Rector, of Jud, N. D., has purchased the elevator at Deer Creek, Minn., and S. M. Rector will have charge of the house.

The Farmers' Co-operative Elevator Company is building a new elevator at Okabena, Minn., and the structure is 74 feet high.

A spur track has been built from the Chicago & Northwestern Railroad to the elevators of Schultz Brothers at Sheboygan, Wis.

The Equity Elevator Company, of Buffalo Lake, Minn., has built a coal shed, 84x32 feet in size, which rests on a concrete foundation.

Harry V. Curry has taken over the elevator of Hanson & Barzen at Crookston, Minn., and will install a grain cleaner and a feed mill.

M. J. Mahoney, of Chokio, Minn., who recently purchased the Ostroot Elevator at Correll, Minn., has overhauled and repaired the house.

B. P. St. John, of Worthington, Minn., has opened his elevator at Winnebago City, Minn., which has been out of commission for several years.

The Hawley Farmers' Elevator Company, of Hawley, Minn., is building an addition to its elevator and improving the house in other ways.

The Farmers' Elevator & Supply Company, of Tyler, Minn., will build a new elevator after dismantling its present house. The new building will have a capacity of 20,000 bushels.

The Franklin Farmers' Elevator Company, of Franklin, Minn., held its first annual meeting last month, when a dividend of 10 per cent was declared on the paid-up capital stock of \$3,950.

The Electric Steel Elevator Company, of Minneapolis, Minn., is rushing the work of constructing additional storage capacity which will give the company a plant with storage facilities for 4,000,000 bushels of grain. The company now has in use 19 fireproof tanks, each having a capacity of 125,000 bushels, and 10 tanks each holding 100,000 bushels,

August 15, 1914.

while the addition which will be ready to receive grain about November 1, will consist of five tanks, each having a capacity of 125,000 bushels.

The Easton Farmers' Elevator Company, recently incorporated at Easton, Minn., has purchased the elevator property of the Easton Grain Company and a new coal house will be constructed.

The annual meeting of the St. Hiliare Farmers' Co-operative Elevator Company was held at St. Hiliare, Minn., last month, when the entire board of directors was elected to serve for the coming year. C. Patterson was re-elected manager.

The Triumph Farmers' Elevator Company has been incorporated at Triumph, Minn., by Harry Sheppard, James Meehan, N. O. Nelson, Gus Johnson, John Peterson, Knudt Helvig, John J. Helvig, P. J. Peterson, John Groth and Martin George.

The Farmers' Co-operative Elevator Company has been organized at Brooks, Minn., with a capital stock of \$10,000, and will build a 25,000-bushel house. The officers are as follows: Arthur Prenevost, president; Michael Welch, vice-president, and Clyde Childs, secretary.

The Farmers' Elevator Company, of Avoca, Minn., has been incorporated with a capital stock of \$25,000. The board of directors consists of the following: M. H. Rath, A. F. Johnson, T. O. Westby, J. E. Holmberg, Frank E. Johnson, H. H. Monke and Henry Lange.

A grain elevator, feed mill and potato warehouse are under course of construction at Clear Lake, Wis., for E. J. Schneider. All of the buildings will be of concrete construction and the elevator will have a capacity of 10,000 bushels. It is expected that the buildings will be complete by October 1.

Paul Gebert, Leo Gensman and Joe West, of Merrill, Wis., who purchased the Thomas Produce Company three years ago, will incorporate under the name of the Merrill Grain Company, and the company may decide to increase its capital stock from \$10,000 to \$15,000. Joe West will continue as manager.

The Caledonia Stock & Grain Company, of Caledonia, Minn., recently held a meeting and voted to dispose of its property, while a committee, consisting of Geo. C. H. Meyer, Ed. Buckley, Alfred Albee, C. J. McCarthy, Fred Schleich and Hubert Konzem, was appointed to act in conjunction with the Caledonia Commercial Club in an effort to form a new stock and grain company.

The site of the Belt Line Elevator at Duluth, Minn., totally destroyed by fire on April 27, and the present annex and new building now in course of construction, have been sold by the Belt Line Elevator Company to the Superior Elevator Company for \$250,000. Recently, a permit was taken out for the new elevator building by the former owners, the structure to cost \$145,000. Plans for the house call for a frame building of 400,000 bushels' capacity. The Cargill Elevator Company operates the plant under a lease. The Barnett & Record Company, of Duluth, has charge of the construction work.

CANADIAN

A new elevator is under course of construction at Elcott, Sask.

The Farmers' Co-operative Elevator Company is building an elevator at Highland, Alta.

The Province Grain Company, Ltd., has been incorporated with a capital stock of \$250,000, and will maintain headquarters at Winnipeg, Man. The incorporators include W. A. Murphy and C. A. Crowley.

The Grain Growers' Grain Company, Ltd., of Winnipeg, Man., has secured a further lease on the Manitoba government elevator system on practically the same terms as previously. The company pays six per cent upon a capital investment of \$1,100,000. The rentals for 179 elevators amount to about \$60,000 a year.

Announcement has been made by the N. M. Patterson Elevator Company, of Fort William, Ont., that the first unit of what is to be eventually a million-bushel elevator, is to be constructed without delay. The first unit will have a capacity of 100,000 bushels and will be equipped with the most modern cleaning and drying machinery.

Preparations are being made by the Saskatchewan Co-operative Elevator Company to erect brick elevators at the following points: Shelbrook, Parkside, Blaine Lake, Waldheim, Wynward, Brook, Fiske, Eston, Richlea, Zealandia, Sedley, Darmedy, Central Butte, Imperial, Pinkham, Jansen, Riverdale, Eagle Creek, Leslie, Turtleford, Kelson, Watson, Broadview, Flunkett and Glenside.

The Kansas wheat crop will require 170,016 cars to bring it to market. That would mean a solid train from Topeka to Washington, D. C. As trains are usually made up it will require 3,400 of them to move the grain. This seems big, but wait till the mathematicians get busy on the corn crop.

ASSOCIATIONS

INDIANA GRAIN DEALERS TO HOLD OUTING

The Indiana Grain Dealers' Association and the Indiana Millers' Association, at a meeting of their respective Boards, August 11, provided for a three days' outing at Culver, on Lake Maxinkuckee, Ind., for September 5, 6 and 7.

Lake Maxinkuckee is in the northern part of the state and affords excellent facilities for boating, fishing and swimming. There will be no business whatever transacted at this meeting and it is intended especially for the entertainment of the trade, including their families and friends. All those connected with the trade, either grain dealers or millers and kindred interests, are invited to be in attendance. The associations will occupy the Lake View Hotel and the Palmer House, Culver, Ind. The outing was held at the same place last year and proved so satisfactory that it was decided to go there again.

STIRRED UP OVER DEFEAT OF PROPOSED AMENDMENT

The Kansas Grain Dealers' Association is stirred up over the defeat of the amendment by the members of the Kansas City Board of Trade by their vote on July 27.

The amendment provided for reinspection on all grain within five days from date of sale. The vote stood 86 for, 46 against, the change in their rule, lacking only 4 votes of a two-thirds majority. This vote shows a gain of five votes in favor of the change since the vote was taken two weeks prior. While the committee of the Kansas Grain Dealers' Association feels greatly disappointed, they are not discouraged and it is their intention to keep up the fight as long as there is any possible show to win. To this end individual members of the association will make a personal appeal to the members of the board with whom they do business.

ILLINOIS GRAIN DEALERS' ASSOCIATION ACTIVE

At a meeting of the Scale Committee of the Association held in Decatur, July 13, Geo. J. Betzelberger and J. B. Sowa, of Delavan, Ill., were appointed scale inspectors for the ensuing year, and the following action was taken:

With a view to more satisfactory working for the scale inspectors the state was divided into ten districts, by counties, as follows: No. 1, Bureau, Henderson, Henry, Mercer, Rock Island, Warren, Whiteside; No. 2, Fulton, Knox, Logan, Marshall, Mason, McDonough, Peoria, Stark, Tazewell, Woodford; No. 3, Boone, Carroll, DeKalb, Jo Daviess, Lee, Ogle, Stephenson, Winnebago; No. 4, Cook, DuPage, Kane, Kendall, Lake, McHenry, Will; No. 5, DeWitt, Ford, Grundy, Iroquois, Kankakee, LaSalle, Livingston, Putnam, McLean; No. 6, Champaign, Clark, Coles, Crawford, Cumberland, Douglas, Edgar, Jasper, Piatt, Vermilion; No. 7, Christian, Macon, Macoupin, Montgomery, Moultrie, Sangamon, Shelby; No. 8, Adams, Brown, Calhoun, Cass, Greene, Hancock, Jersey, Menard, Morgan, Pike, Schuyler, Scott; No. 9, Bond, Clay, Clinton, Edwards, Effingham, Fayette, Jefferson, Lawrence, Madison, Marion, Monroe, Perry, Randolph, Richland, St. Clair, Wabash, Washington, Wayne; No. 10, Alexander, Franklin, Gallatin, Hamilton, Hardin, Jackson, Johnson, Massac, Pope, Pulaski, Saline, Union, White, Williamson.

The inspectors were instructed to begin in district No. 2 in the month of August, next, and complete all the work in that district before going to another. The secretary was directed to inform each member in district No. 2, by letter, and advise them to have their scales put in order in the month of August, as the inspectors would not return again to that district until they had gone over all the districts in turn. The secretary is to take up the next district and canvas it for those who want their scales put in order in September, and so on over the entire state.

This arrangement, it is hoped, will greatly reduce the travel of the inspectors and thus their expenses. The secretary was directed to send to all members information as to the action of the Scale Committee.

About thirty grain dealers attended a social meeting at DeKalb, Ill., July 15, under the auspices of the Illinois Grain Dealers' Association. The topics under discussion were "How to Buy Grain," "The Storage of Grain" and "United States Grades of Corn."

S. W. Strong, secretary of the Association, and Mr. Booth, of Lamson Brothers Company, of DeKalb, were the speakers.

The effort of the association at the present time is to have the grading system understood by the

farmers, the ultimate intention being to have them raise better corn. To further this the Association announces that it will hold a series of forty big meetings all over the state this summer and fall. The new grading system is an improvement on the old rules of grading in that farmers will be more careful in cribbing, shelling and marketing of the product. There is little protest in any part of the state on the new rules. A meeting will be held August 15 at Bloomington, Ill., by the Illinois Grain Dealers' Association where instructions will be given to the farmers in attendance.

The Illinois Grain Dealers' Association has added seven new members to its list recently. They are Chambers & Foote, Sadorus; De Long & Willson, Clinton; Honefenger Grain Company, Owaneco; H. Jonas & Co., Centralia; Wm. Kaufmann Company, Buckley; J. M. Krautz, Mt. Pulaski; C. F. Scholer, Farmer City.

MISSOURI GRAIN DEALERS ORGANIZE

The Missouri Grain Dealers' Association was formed at a meeting held at Sedalia, Mo., July 25. The organization starts with a charter membership of fifty and will be increased until it covers the leading grain interests of the entire state.

Carl Hunter, of the Sedalia Milling Company, was in charge of preliminary arrangements for the convention, and C. E. Ryle of the Christopher & Son commission house, helped in entertaining the visitors. The rules and by-laws of the Kansas association were accepted and the following officers of the Southwest Missouri Grain Dealers' Association were made temporary officers of the Missouri body: President, J. D. Mann, Montrose; vice-president, W. D. Schmidt, Appleton City; secretary, A. G. Sullivan, Nevada. Excellent talks along the line of organization were made by several in attendance.

CONDEMN STORAGE LAWS OF NORTH DAKOTA

The third annual session of the North Dakota Association of Managers of Farmers' Co-operative Elevators was held July 15 and 16 at Grand Forks, N. D. About 50 delegates were present for the two days' meeting. Resolutions condemning the present grain storage laws of North Dakota were passed. A banquet was given in the evening of the first day's session to the association members by the Retail Merchants of North Dakota, who were also holding their convention at that time. Including the members of both bodies about 200 attended the banquet.

The main business sessions of the convention was held on the second day, when the officers and directors were elected.

President—J. H. S. Thompson, Valley City.

Vice-president—A. A. Lane, Sherwood.

Secretary—N. R. Tacklind, Drayton.

Assistant Secretary—August Everett, Hillsboro.

Directors—C. Gibson, Ypsilanti; C. B. Pritchard, Gardiner; John Ruttle, McHenry; J. S. Broberg, Adams; Martin Moe, Adams; A. K. Moehn, Regent, and J. A. Stockstad, Milnor.

CHICAGO FEED DEALERS' ANNUAL PICNIC

The thirty-first annual picnic of the Chicago Retail Feed Dealers' Association was held at Glenwood Park, Ill., on July 29. Practically all of the feed stores and hay stores in Chicago were closed, at least a half a day, to give the owners and the employees a chance to join in with the women and children in making the day the greatest in the history of the association. Fully 2,000 people were transported on four special trains to the picnic grounds. Being situated on the Fox River, the women and children soon found pleasure in bathing, while the men indulged in many of the games of their boyhood days. The baseball game between the South Side and the North Side proved to be the feature of the day and afforded great fun and excitement for the onlookers. A disinterested person said the score was 14 to 13, favoring the South Siders.

The park furnished ideal picnic grounds, with plenty of shade trees, several drinking fountains, and a large dance hall where many spent the early afternoon hour tangling. When the sun settled behind the trees the game committee ran off the various contests, including a sack race, young ladies' race, boys' three-legged race, teamsters' race, married ladies' race, fat men's race, spoon race and tug of war. The latter event, between the North Side and South Side teamsters, created great excitement. Both claimed victory and it was not deemed safe, therefore, to render any decision. The picnic serves to bring the members together as no other event

August 15, 1914.

could, and President Edward Badenock and Secretary B. E. Worley are to be congratulated on the splendid success of this year's "day of good times."

ASSOCIATION BRIEFS

The Michigan Hay and Grain Dealers' Association will hold its sixth annual convention at Saginaw, Mich., August 26.

The annual convention of the Illinois Alfalfa Association was held at Dixon, August 7. The fact that the organization of alfalfa growers is making a rapid growth, although comparatively new, is surely worthy of comment.

Secretary Riley of the Indiana Grain Dealers' Association appeals to the different markets to use the utmost care and pains in the examination of all cars for leaks and bad order condition, as well as to make a careful record of the name and number of the seals on cars when examined, reporting same with each set of certificates. More bad condition

cars are in service this year than ever before, and dealers will have to be careful.

At a meeting of the North American Grain Exporters' Association held in New York last week, it developed that export sales of wheat alone from the United States up to the time war in Europe was declared, exceeded 100,000,000 bushels. Exporters from all parts of the country attended the conference. It was decided that before any wheat is allowed to be exported the money must be in bank to the exporter's credit.

A meeting was held at Lansing by the Michigan State Hay Dealers' Association last month when plans were laid for next year's work and officers were elected. The Association will continue its policy of holding monthly meetings. No big meeting is held but the work is conducted by the twelve monthly gatherings. The following officers were elected: President, Frank Young, Lansing; vice-president, Charles Noyce, Jackson; secretary, J. C. Graham, Jackson.

and 200 barrels of cement were consumed; practically all the office fixtures were saved. The loss was about \$15,000, with \$6,300 insurance. The elevator will be rebuilt.

The buildings of the Kadoka Grain Company at Kadoka, S. D., together with \$1,600 worth of grain, were destroyed by fire this month, entailing a total loss of \$6,600. Louis Determan, who held the chief interest in the property, will rebuild.

Fire, believed to have been caused by sparks from a locomotive, destroyed the house of the Dakota Grain Company and the Caldwell Elevator at Merricourt, N. D., together with other buildings, the total loss amounting to about \$40,000.

The hay and feed warehouse and coal sheds of E. C. Roberts at Lennon, Mich., were destroyed by fire recently, the flames resulting from an engine spark. Twenty tons of hay were consumed and the loss was estimated at \$5,000, covered by insurance.

The warehouses of the Farmers' Union, the Seattle Grain Company, McDonald, Hale & Co., and the Puget Sound Company, and other buildings at Krupp, Wash., were destroyed by fire last month, the entire loss amounting to \$35,000, covered by insurance.

The new warehouse and grain elevator of the Smith Brothers Feed & Grain Company at Boyles, near Birmingham, Ala., was destroyed by fire on July 18, with a loss estimated at \$10,000. The building was three stories high, of brick and concrete construction.

The elevator of the Cerro Gordo Grain & Coal Company at Cerro Gordo, Ill., was damaged by fire last month, the loss amounting to between \$200 and \$300, fully covered by insurance. There were 10,000 bushels of wheat in the house but it was only slightly damaged by water.

The Taylor Grain Company, of Memphis, Tenn., lost its elevator by fire last month, entailing a loss of \$20,000 with insurance amounting to approximately \$16,000. The plant was comparatively new, having been erected several months ago and was equipped with up-to-date machinery operated by electric motors.

Charles Collins, manager of the elevator at Cayuga, Ill., owned by the Pontiac Farmers' Grain Company, of Pontiac, Ill., met with painful injuries while preparing a grain car for shipment on July 29. An engine backed into the car, throwing Mr. Collins on the floor, when a nail entered his knee and pierced the bone.

The hay barn of Albert Labhardt, dealer in grain, feed and coal at Greenville, Ill., containing 50 tons of hay, was destroyed by fire on July 21, but the elevator building was not seriously injured. The flames are believed to have originated from locomotive sparks and the loss was about \$2,000, fully covered by insurance.

The Terminal Elevator at Sioux City, Iowa, operated by the Mystic Milling Company, was burned with a loss of \$120,000 on July 13, with \$50,000 insurance. The building was an eight-story structure, built by the Sioux City Terminal Grain Elevator Company several years ago. A brick power house connected with the plant was saved.

The passengers and crew of a Chicago, Peoria & St. Louis train volunteered as a bucket brigade to save a burning elevator at Long Branch (R. F. D. from Raleigh), Ill., on July 27. The house had been struck by lightning and the flames were gaining rapidly when the train crew delayed the train and saved the building from destruction.

One of the elevators at Garretson, S. D., owned by William Callahan, of Brookings, S. D., was destroyed by fire on July 13, the flames probably caused by tramps. The house had been out of commission for several years but Mr. Callahan had prepared to operate the elevator this season and a few loads of grain had been stored in the building. The loss was partially covered by insurance.

The destruction of the Wallace Grain & Supply Company's elevator near Ottawa, Ill., by fire on July 24, resulted in a loss of \$15,000. Two box cars loaded with corn were also consumed with 10,000 bushels of corn and about 3,500 bushels of oats stored in the elevator. The loss is largely covered by insurance. The office building, located about 100 feet from the elevator, escaped the flames. The company is preparing to build a concrete structure to replace the elevator.

While coaling in the mouth of the Chicago River the floating grain elevator "Helena" was driven by a swift current against a dock with such force that a hole was torn in its side under the water line, causing it to capsize with its cargo of 6,000 or 8,000 bushels of wheat. The elevator is the property of the Armour Grain Company and was put in commission about two or three years ago, when the Ellis Drier Company, of Chicago, built a drying plant of 75,000 bushels' capacity per 24 hours on the grain vessel, which had a carrying capacity of 125,000 bushels. The boat plies between Buffalo and Chicago. The loss is estimated at \$50,000, fully covered by insurance.

FIRE S-CASUALTIES

The Occident Elevator at Clyde, N. D., was destroyed by fire last month.

Fire partially destroyed the elevator of W. W. Evans at Fowler, Ind., last month.

The house of the Farmers' Elevator Company at Crystal, N. D., was damaged by lightning on July 21.

The Ostroot elevator and the Anchor elevator at Hazel, S. D., were entirely destroyed by fire on July 24.

The elevator of the Marshall Milling Company at Marshall, Minn., was slightly damaged by lightning on July 21.

The house of the Cargill Elevator Company at Newburg, N. D., was slightly damaged by lightning last month.

The elevator of the Gage Roller Mills at Laverne, Okla., with about 1,400 bushels of wheat, was destroyed by fire recently.

The office building of Oscar H. Stotler, dealer in grain and coal at Risk, Ill., was slightly damaged by lightning on July 16.

The hay and grain warehouse of W. P. Brown & Co., at Memphis, Tenn., was recently destroyed by fire with a loss of \$40,000.

The Williams Feed Store at California, Pa., was destroyed by fire on July 30, the loss, including other property, amounting to \$10,000.

J. C. Meyers' elevator at Andres, near Manhattan, Ill., was burned on July 31, entailing a loss of \$6,000, partially covered by insurance.

One of the elevators at Rival (R. F. D. from Columbus), N. D., was struck by lightning last month and destroyed by the fire that followed.

The Duff Elevator at Turlington, a grain station between Dunbar and Syracuse, Neb., was struck by lightning on July 23 and badly damaged.

The Equity Elevator & Trading Company, of Lisbon, N. D., suffered a small loss by fire on July 15, when its house was struck by lightning.

The warehouse of the Jacksonville Grain & Commission Company at Jacksonville, Fla., was destroyed by fire with a loss of about \$10,000.

A fire which originated in the lumber shed of the Farmers' Elevator Company at Goldfield, Iowa, recently, destroyed \$30,000 worth of property.

The elevator of the Western Lumber & Grain Company at Griffin, N. D., was partially destroyed by fire on July 28, the flames caused by lightning.

Three elevators at Walcott, Iowa, and vicinity were destroyed by fire on August 6, when struck by lightning, entailing a loss of approximately \$40,000.

The elevator of the Farmers' Co-operative Grain & Supply Company at Reeder, N. D., was partially destroyed by fire last month when struck by lightning.

Lightning caused the complete destruction of the Buhman Elevator at Grand Mound, Iowa, on July 16, the loss amounting to \$10,000 with about \$4,000 insurance.

The building and stock of the Berry Grain Company at Jonesboro, Ark., were damaged by fire on July 23, with a loss to the stock of \$1,000, covered by insurance.

The grain elevator and warehouse at Lucas, Ohio, owned by Thomas A. Parry, was completely destroyed by fire on July 28. There was a small quantity of grain in the house and there was no

insurance on the buildings or contents. A part of the office fixtures was saved. The building was a three-story frame structure, about 40x60 feet on the ground.

An elevator belonging to the Kaw Elevator Company at Kansas City, Mo., was destroyed by fire recently, the loss on the building amounting to \$4,000 and the contents, \$7,000.

Lightning struck the elevator of Elias Hutton at Frankfort, Ohio, on July 26, and it was entirely destroyed by fire, together with 7,000 bushels of wheat, entailing a loss of \$15,000.

Fire on July 24 destroyed the malting plant and elevators of the Sioux Falls Brewing & Malting Company at Sioux Falls, S. D., with a loss of \$200,000 on building, equipment and grain.

Carl Weakley, manager of the Farmers' Elevator at Prentice, Minn., was seriously injured on July 31 when a weight from the manlift fell, and striking him on the head, caused a serious fracture.

M. Nowak, of Hammond, Ind., was killed in the plant of the Western Grain Produce Company at West Hammond, Ill., when he was caught in the belting of a machine and whirled around the shafting.

Fire destroyed the dock of the Rialto Elevator Company in South Chicago, Ill., on July 23, but the work of a fire tug saved the elevator, which is owned by the Rosenbaum Grain Company, of Chicago.

The Grand Trunk Railroad suffered a loss of \$50,000 when its elevator and warehouse at Grand Haven, Mich., were destroyed by fire on July 23. The elevator had a capacity of 56,000 bushels of grain.

Fire damaged the plant of the Romano Feed & Grain Company at Birmingham, Ala., to the extent of \$3,000 recently, the loss partially covered by insurance. The flames originated in the grain storage rooms.

The grain elevator of Gilbert Hawkins at Fowler, Ind., was destroyed by fire on July 28, with several thousand bushels of grain, the loss amounting to \$60,000. The fire is believed to have been the work of incendiaries.

Fire of unknown origin damaged the elevator of Jameson, Hevener & Griggs at St. Paul, Minn., on July 16, to the extent of \$30,000 or \$40,000. It is understood that a new building will be erected on the site as soon as possible.

Fire, which started in a pile of corncobs near the engine room, destroyed the Jenkins & Cohee Elevator at Whitestown, Ind., on July 16, causing a loss of \$30,000, partially covered by insurance. The firm expects to rebuild the house.

At an early hour on the morning of July 26 the elevator of Babcock & Hopkins at Rensselaer, Ind., was completely destroyed by fire, together with 20,000 bushels of grain. The building was valued at \$25,000 and was insured for \$15,000.

The Zorn Elevator at Le Roy, Ill., was threatened with destruction on July 20, when a small gasoline tank exploded in the engine house, which stands a few feet from the main building. Quick work of the fire department saved the house.

The Paint Valley Elevator at Frankfort, Ky., was struck by lightning on July 26, and destroyed by the fire that followed, together with a quantity of grain. The house was owned by Elias Hutton. About 6,300 bushels of wheat, 200 bushels of corn

August 15, 1914.

121

TRANSPORTATION

On September 1, in accordance with an action of the Southwestern Tariff Association, all rice-carrying roads will cancel milling-in-transit privileges on rice.

The Interstate Commerce Commission has decided to re-establish a two-cent differential under the Cincinnati rate on freight rates on grain products and mixed feeds out of Memphis, Tenn., to South Carolina points.

"More than 120 new locomotives will be delivered to several railroads within the next ten days. All the railroad shops are working night and day. All roads have recalled their grain cars from foreign lines to have them ready for Illinois business."

Effective September 10, the Chicago & Northwestern Railway has published a tariff naming rates on corn and oats from points in Iowa, Minnesota, South Dakota and North Dakota to Cincinnati, Ohio, and Jeffersonville and New Albany, Ind., on shipments destined to points in Southeastern and Carolina territories.

Following the protest of the Merchants' Exchange, St. Louis, Mo., against the withdrawal by the Louisville & Nashville and the Illinois Central railroads of an elevation allowance of one-fourth cent per bushel on grain at St. Louis and East St. Louis, when destined to Evansville, Ind., the Interstate Commerce Commission ruled that the withdrawal was justifiable and vacated its order of suspension of the rates.

Seven railroads operating in Illinois have purchased 20,650 new grain cars to assist in handling the grain crop. "These seven railroads," said Chairman James E. Quan, of the State Public Utilities Commission, "inform us that they will be able to handle adequately this year the largest crops ever known in this State. A larger number of grain cars will be at the service of shippers during the season of 1914 than ever before. Besides the 20,650 new grain cars ordered by seven railroads, all the roads

report that they are reconstructing stock cars and other cars to be in condition to handle grain. One single railroad is rebuilding 3,000 cars.

J. S. Brown, transportation manager of the Chicago Board of Trade, advises that the Interstate Commerce Commission has suspended the publication of the carriers, effective August 1, cancelling application via Chicago of the reshipping rates on grain and grain products from Milwaukee, Wis., to points in Eastern Trunk Line territory.

In the case of the Kaufman Commercial Club, Kaufman, Texas, against a number of railroads, involving rates on grain and grain products from points in Kansas and Oklahoma to Kaufman, Texas, the Interstate Commerce Commission found the rates unduly prejudicial and prescribed rates not in excess of those maintained to Terrell, Texas.

The New York Public Service Commission has ordered the New York Central to amend its tariffs so that the rate shall be the same on grain in carload lots to Niagara Falls from Hamlin on the Ontario division, as from Brockport on the Falls branch, and the same from Kendall, on the Ontario division as from Fancher on the Falls branch.

The State Railroad Commission of Texas has announced an amendment to grain tariffs as follows: "Mixed cars out of transit point, containing grain that has been accorded stopping privilege and grain products that have been accorded milling privileges may be handled under transit rules, applying to the proportion of each the rules applicable thereto."

Freight tariffs of the Chicago, Rock Island & Pacific and other railroads proposing to cancel the routing of shipments of grain, grain products, etc., via Fort Worth, Texas, in connection with all lines other than the Trinity & Brazos Valley Railroad from points in Oklahoma and other states destined to Galveston and other points in Texas, have been suspended by the Interstate Commerce Commission from July 24 to November 21.

Supplement 22 to I. C. C. No. 6222, September 6. Grain to Louisville, Ky., from Streator, Ill., Peoria, Ill., 15 cents; Galesburg, Ill., 16.5 cents; East Fort Madison, Fort Madison, 17 cents; Rock Island, Iowa, 16.5 cents.

Supplement 1 to I. C. C. No. 6829, September 10. Corn and oats from Trinidad, Colo., to Raton, 10 cents; Hebron, 16 cents; Dorsey, N. M., 16 cents (R); Maxwell, 17½ cents; French, 18 cents; Springer, 19 cents; Colmor, 20 cents; Wagon Mound, 21½ cents; Watrous, 24½ cents; Las Vegas, 25½ cents; Gardiner, 13 cents; Brilliant, 15 cents (R); Van Houten, N. M., 16½ cents.

Chicago, Rock Island & Pacific

I. C. C. No. C9685, August 14. Flax seed from Atchison, Leavenworth, Kan., Kansas City, St. Joseph and Sugar Creek, Mo., to Council Bluffs, Iowa, Omaha and South Omaha, Neb., 12.5 cents.

Supplement 2 to I. C. C. No. C9667, August 24. To Ross City, Okla., from Little Rock, Ark., wheat, 20½ cents; corn, 17½ cents.

Supplement 4 to I. C. C. No. C9614, August 26. Imported via Galveston and Texas City, Texas, to Huntley, Stecker, Apache, Richards and Fort Sill, Lawton, Holliday, Faxon and Chattanooga, Okla., wheat, 24½ cents; corn, 22 cents.

Supplement 12 to I. C. C. No. C9455, August 29. From Atchison, Armourdale, Kan., Council Bluffs, Iowa, Kansas City, Mo., Leavenworth, Kan., Omaha, Neb., St. Joseph, Mo., South Omaha, Neb., to Cincinnati, Ohio, Jeffersonville, Ind., New Albany, Ind., wheat, 13 cents; corn, 12 cents; oats, 12 cents; Louisville, Ky. (when destined to Southeastern or Carolina territory), wheat, 14 cents; corn, 13 cents; oats, 13 cents.

C. E. Fulton, Agent for Chicago & Ohio River Committee

I. C. C. No. 109, August 15. Grain, flour from Chicago, Dolton, Forest Hill, Joliet, Kankakee, Riverdale, Stony Island, Washington Heights and West Fullman, Ill., to Knoxville, Tenn., 29 cents; from La Crosse, Wis., Minneapolis, Minnesota Transfer, St. Paul and Winona, Minn., to Columbia, S. C., 42 cents; buckwheat, flour, pearl barley, potato flour, prepared flour, rye flour and wheat flour from Minneapolis, Minnesota Transfer and St. Paul, Minn., to Knoxville, Tenn., 37 cents.

Agent for Western Trunk Line Committee

Supplement 20 to I. C. C. No. A427 Trf. 1001-G, August 15. Malt in bags to Key West, Fla. (for export to Havana, Cuba) from points in the following groups, Chicago, Milwaukee, Dubuque, Peoria, Springfield, Indianapolis, St. Louis, Cincinnati, Louisville, Evansville, Cairo and Detroit, 23 cents.

Michigan Central

I. C. C. No. A550, August 16. Grain and products from Fort William and Port Arthur, Ont., to Boston, Mass. (for export), 18 cents (R).

I. C. C. No. 4550, August 16. Grain and grain products from Port Arthur and Fort William, Ont., to Albany, N. Y., 17½ cents; Baltimore, Md., 18 cents; Boston, Mass., 20 cents; New York, N. Y., and Philadelphia, Pa., 18 cents; Rochester, N. Y., Syracuse, N. Y., 15 cents; Utica, N. Y., 16 cents.

Illinois Central

Supplement 21 to I. C. C. No. 3777, August 19. Feed, manufactured, from Baton Rouge and North Baton Rouge, La., to Belgrade, Belzoni, Hard Cash, Silver City and Yazoo City, Miss., 14 cents; Jackson, Miss., 12½ cents; Greenwood, Miss., 15 cents.

Northern Pacific

Supplement 8 to I. C. C. No. 5531, August 20. Grain, flour and mill feed from Tacoma, South Tacoma and Seattle, Wash., to Page, Wash., 14½ cents; Snake River Junction, 14½ cents; Kahlotis, Washtucna, Hooper, 15 cents; Benge, Lamont, Stoner, Wash., 15½ cents; South Cheney, Wash., 15¾ cents.

Chicago, St. Paul, Minneapolis & Omaha

Supplement 18 to I. C. C. No. 3855, August 23. Timothy seed from St. Paul, Minneapolis and Minnesota Transfer, Minn., to Duluth, Minn., and Superior, Wis., 10 cents.

Chicago & Northwestern

Supplement 48 to I. C. C. No. 6222, August 24. Wheat, corn, rye, oats, barley and articles taking same rates from Kenosha, Milwaukee, Racine and Racine Junction, Wis., to Lake Zurich, Wauconda, Ill., 7/5 cents (R).

I. C. C. No. 7581, September 10. Corn and oats to Cincinnati, Ohio, Evansville, Jeffersonville, New Albany, Ind. (when destined to Southeastern and Carolina territories), from Clinton, Camanche, 14 cents; Anamosa, 16.5 cents; Sioux City, 20.5 cents; Marshalltown, 17 cents; Cedar Rapids, 16.5 cents; Mason City, Iowa, 19 cents (R).

Leland, Agent for Southwestern Tariff Committee

September 1. Prepared stock feeds, milo maize, chops and Kaffir corn chops from Beaumont, Texas, to Alexandria, La., Monroe, Rayville and Tallulah, La., 20 cents.

Louisville & Nashville

Supplement 7 to I. C. C. No. A12797, August 24. Rice (brewers'), from Memphis, Tenn., to Nortonville, Ky., 18 cents; rice (clean), from Memphis, Tenn., to Nortonville, Ky., 35 cents (R); rice

CHANGES IN RATES

These changes in rates affecting grain and grain products are furnished to the "American Grain Trade" by the General Traffic Association, Inc., 715 Fourteenth Street, N. W., Washington, D. C. If any of our readers feel that the present rates or those which are about to become effective are unjust, excessive or discriminatory, this company has agreed to take care of such matters before the Interstate Commerce Commission, at only a nominal cost.

Since our last issue the following new tariffs have been filed with the Interstate Commerce Commission, naming rates on grain and grain products with the I. C. C. numbers, effective dates and rates in cents per 100 pounds. (A) means advance and (R) means reduction:

Great Northern

Supplement 2 to I. C. C. No. A3721, August 5. Barley (chopped, cracked, crushed or rolled), barley bran, bran meal, brewers' corn meal, brewers' corn grits, buckwheat, corn (common or Kaffir), corn meal, grain screenings, oats, mill feed, rye and other commodities from Spokane, Wash., to Elmira, 11 cents; McArthurs, 10 cents; Naples, 9 cents; Connors Ferry, 8 cents (R), and Sand Point, Idaho, 12 cents (R).

Supplement 5 to I. C. C. No. A3769, August 15. Bran, flour, grain middlings, screenings, shorts from Red Lake Falls, Minn., to Grand Forks, N. D., 7 cents.

I. C. C. No. A3867, August 29. Wheat from Herman and Osakis, Minn., to Los Angeles, Cal., 75 cents; from Sauk Centre and St. Cloud, Minn., to San Francisco and Oakland (Long Wharf), Cal., 75 cents; from Billings, Mont., to Boise, Idaho, 58 cents; Salt Lake City and Ogden, Utah, 56 cents; from Aberdeen, S. D., Ada, Appleton, Argyle, Barnesville, Breckenridge, Climax, Crookston, Elizabeth, Fergus Falls, Graceville, Hallock, Moorehead, Pelican Rapids, Red Lake Falls, Stephen, Thief River Falls, Wadena, Warren, Minn., and Watertown, S. D., to Ogden, Utah, 71 cents; East San Pedro, Cal., 63 cents; San Pedro, 63 cents; San Francisco, Cal., 65 cents; Oakland (Long Wharf), 65 cents; Los Angeles, 75 cents; Salt Lake City, 71 cents; Santa Barbara, 75 cents; San Diego, 65 cents.

Supplement 12 to I. C. C. No. A3720, August 25.

From East Fairview, N. D., from Chicago, Ill., flax seed and millet seed, 30½ cents; grain and grain products, 28½ cents; to East St. Louis, Ill., and St. Louis, Mo., grain and grain products, 29½ cents; flax seed and millet seed, 31½ cents.

Atlantic Coast Line

I. C. C. No. A3065, August 9. Corn, wheat, middlings, wheat, bran, shorts or millstuffs (imported, not to apply from shipside), from Savannah, Ga., to Armour, Athens, Atlanta, Belt Junction, Cartersville, Cedartown, Chattahoochee, Columbus, Dady Spur, Mina, Dalton, Inman Park, Federal Prison, Fort McPherson, Ga., and other Georgia points, 17 cents.

Norfolk & Western

I. C. C. No. 5158, August 10. Corn, in packages imported from Argentine Republic, via Norfolk and Lambert's Point, Va., to Lynchburg, Va., 8½ cents (R).

Chesapeake & Ohio

I. C. C. No. 5848, August 10. Corn from shipside Newport News, Va., to Lynchburg, Va., 8½ cents (R) (applies on shipments from Argentine Republic).

Chicago & Alton

Supplement 6 to I. C. C. No. A539, August 10. Grain from Louisiana and Hannibal, Mo., to Baltimore, Md., 20.5 cents; Boston, Mass., New York, N. Y., 22 cents, and Philadelphia, Pa., 21 cents; grain products from Louisiana, Mo., to Baltimore, Md., 21 cents; Boston, Mass., 24 cents; New York, N. Y., 24 cents (rates on flour to Boston and New York, 23 cents); to Philadelphia, Pa., 22 cents (all rates for export).

Atchison, Topeka & Santa Fe

I. C. C. No. 6829, August 10. Flour and articles taking same rates from Santa Fe, N. M., to Albuquerque, N. M., 15 cents (proportional rate only), between Trinidad, Colo., and Raton, N. M., 11 cents.

I. C. C. No. 6833, August 15. Wheat and articles taking same rates from Meloche, N. M., to La Junta, Lamar, Colo., 34 cents; to Bernalillo, 36 cents; Belen Socorro, N. M., 37 cents, and El Paso, Texas, 42 cents (R).

(brewers'), to Elizabethtown, Ky., from Memphis, Tenn., 18 cents; rice (clean), to Elizabethtown, Ky., from Memphis, Tenn., 33 cents (R).

A. D. Hall, Agent for Southern Freight Committee
Supplement 3 to I. C. C. No. A48, August 25. From St. Louis, Mo., and East St. Louis, Ill., to Key West, Fla., for export to Havana, Cuba, corn, oats, 20½ cents; wheat, 21½ cents; to Mobile, Ala., New Orleans and Port Chalmette, La., corn, barley, oats and rye, 10½ cents; barley and rye, 10½ cents; corn, 10½ cents; oats, 10½ cents; wheat, 10½ cents; Pensacola, Fla., for export, corn, barley, oats and rye, 10½ cents.

Missouri, Oklahoma & Gulf

Supplement 3 to I. C. C. No. 78, August 27. To Algiers, Gretna, New Orleans, Westwego, Port Arthur, Galveston and Texas City, Texas, for export from Cleora, Okla., wheat, 24½ cents; corn, 21½ cents; from Lehigh, Booneville, Nixon, Stonewall, Frisco, Truax, Ada, Okla., wheat, 23¾ cents; corn, 21½ cents; Center, Okla., wheat, 24 cents; corn, 22 cents.

Minneapolis & St. Louis

Supplement 2 to I. C. C. No. B134, September 1. From Minneapolis, Minnesota Transfer and St. Paul, Minn. (applies only on shipments originating beyond or on the products of grain or seeds originating beyond) to Chicago, Chicago Heights, Lockport, Peoria, Pekin, Ill., and Milwaukee, Wis., barley, corn, oats, rye, speltz and Kaffir corn, 7½ cents; buckwheat, brewers' refuse, dry and gluten feed, 10 cents; flax and millet seed, flax seed hulls, flax seed screenings, 10 cents; elevator dust, oat clips, oat chops, oat hulls and refuse (flour and mill), 7½ cents; grain screenings, malt, malt sprouts and malsters' refuse, 7½ cents; wild mustard seed and wheat (except buckwheat), 10 cents.

Chicago, Milwaukee & St. Paul

Supplement 140 to I. C. C. No. A9945, September 1. Oil cake and oil meal from St. Paul, Minneapolis and Minnesota Transfer, Minn., to Jackson, Prairieburg, Coggon, Robinson, Kiens and Quasqueton, Iowa, 10 cents; grain products from Waukegan, Ill., to St. Paul, Minneapolis and Minnesota Transfer, Minn., 15 cents.

Duluth, South Shore & Atlantic

I. C. C. No. 2579, September 3. Grain, flour and millstuffs from Duluth, Minn., and Superior, Wis., to Ontonagon, Mich., 16½ cents (R).

A record in wheat stooling was supposed to have occurred near Columbia, Tenn., this spring. A farmer found that one grain of wheat had produced 52 stools.

The Buenos Aires Central Railroad of Argentina has placed the contract for eight grain sheds to take care of the corn crop on its line. The aggregate area of the sheds will be 12,800 square meters, or 137,500 square feet. The sheds will be of steel construction.

The United States Government recently placed a contract for 130,000 bushels of oats to be delivered at Galveston. This is said to be the largest contract ever awarded to a Texas firm on similar terms. The Wisrodt Grain Company of Galveston will make the delivery.



From the Philadelphia Public Ledger

A RAILROAD VIEW OF THE RATE DECISION

There once was a man who had a cow
And he had nothing to give her
So he took up his pipe and played her a tune
Consider, good cow, consider.

OBITUARY

P. F. Meyer, manager of the J. S. Gordon Grain Company, Beaumont, Texas, suddenly died last month.

William Hegemna, formerly superintendent of the Grain Elevating Company, of Manhattan, died on July 21, at his home in Brooklyn, N. Y., aged 70 years.

E. E. Jones, aged 54 years, grain and hay dealer at Kenton, Ohio, passed away on August 6, after several weeks' illness. He is survived by his mother and two sons.

Walter Fitch, senior member of the brokerage firm of Walter Fitch & Co., Chicago, and former president of the Chicago Board of Trade, died at Eau Claire, Wis., on July 16, aged 52 years. Further details are given elsewhere in this issue.

Thomas H. Danger, said to have superintended the work on the first grain elevator in Scotland, died at his home in Port Huron, Mich., on July 17. He was a prominent Mason and was at one time superintendent of public works at Port Huron.

Following injuries received in his elevator at Pacific Junction, Iowa, Winfield Scott, aged 37 years, died in the Jennie Edmundson Memorial Hospital at Council Bluffs, Iowa, on July 20. Mr. Scott was born at Centerville, Iowa, and is survived by his parents, three brothers and four sisters.

Samuel W. Tallmadge, aged 68 years, for more than half a century a member of the Milwaukee Chamber of Commerce, passed away at his home in that city last month. Mr. Tallmadge was born in Montezuma, N. Y., and engaged in the grain business in Milwaukee in the late fifties. He served on the Union side during the Civil War, a part of

which time his father was president of the Milwaukee Chamber of Commerce. He was known throughout the city for his integrity of purpose and his charitable disposition. His wife and eight children survive him. He was buried with Masonic honors.

Moses B. Tyson, who with his son, conducted a flour and feed business at Pottstown, Pa., died at his home at Limerick, Pa., aged 69 years. He was a native of Limerick and was in business there for 24 years before going to Pottstown eleven years ago. He leaves a widow, one son and a daughter.

W. H. Norton, one of the younger members of the Minneapolis Chamber of Commerce, died at the Eitel Hospital in that city last month. He had been connected with the grain trade for eight years, his last association having been with the Gilfillan-Redmund Company. He is survived by his wife and two children.

Henry Neser, aged 66 years, a member of the grain firm of G. A. Hax & Co., died on July 16 at the home of his daughter, Mrs. William F. Kendall, in Baltimore, Md., from an attack of acute indigestion. He had been engaged in the grain and hay business for 30 years and was a member of the Baltimore Chamber of Commerce.

The death of W. C. Lewis, of Edgerton, Ohio, for 40 years a prominent cash grain dealer in that state, occurred at Eitel Hospital in Minneapolis, Minn., on July 31. Mr. Lewis was 65 years of age and was a brother of Charles E. Lewis, of the Minneapolis Chamber of Commerce. He is survived also by his wife, two daughters, another brother and a sister.

IN THE COURTS

It is stated that the elevator of Douglas Brothers at Ottawa, Ill., was closed by attachment July 29, to satisfy a \$600 claim of the Putnam Banking Company.

Three men have brought suit against the Montrose Elevator Company, Montrose, Mich., charging that seed corn sold by the company was not as represented.

A judgment for \$79.88 damages against the C. H. & D. Railroad was returned in favor of Kohn & Deirick, grain dealers at Custar, Ohio, in their case alleging a shortage in the weight of corn at its destination.

Last month the United Grain Company brought suit against the Colgate Farmers' Elevator Company at Fargo, N. D., for \$7,000 claimed to be due the commission firm, while the defendants alleged that sales made for them by the plaintiff were gambling transactions.

Greenfield & Crumpton, commission merchants of Superior, Wis., have filed action against the Equity Co-operative Exchange, of Minneapolis, Minn., for \$21,166 damages, charging mismanagement and violation of contract, while a second suit has been filed at Fargo, N. D., where the Exchange maintains an

office, to compel the officers of the company to produce its books for investigation.

A judgment in favor of the defendant was rendered in the case of T. C. Bottom, of Kansas City, against the N. J. Olson Company, seed dealers of Moorhead, Minn. The plaintiff alleged breach of contract.

Owing to conflicting claims between farm owners and tenant as to the ownership of wheat, the Kingston Grain & Mill Company, of Kingston, Ohio, filed a petition for the privilege of paying the court the sum of \$1,306.23 and the request was granted.

Alleging that four carloads of hay were damaged in transit, the Roberts-Hanner Grain Company, of Memphis, Tenn., has filed an injunction to restrain the receivers of the St. Louis & San Francisco Railroad from disposing of any of the assets of the company or paying any claims.

Application has been made to the court at Winnipeg, Man., for a warrant for the arrest and imprisonment of J. B. Campbell, for many years a prominent member of the Winnipeg Grain Exchange, who went into liquidation several weeks ago and left for the United States. It is said that he owes creditors over \$100,000.



August 15, 1914.

123

FIELD SEEDS

*Grain and
Seeds*

The North Wisconsin Seed Company will build a storage house at Conrath, Wis.

The V. Peterson Alfalfa Seed Company, of which V. Peterson is the president, has established a business at Arbuckle, Cal.

The Farmers' Seed & Supply Company has been incorporated at Lynchburg, Va., with a capital stock of \$21,000 to \$25,000, to deal in seeds, hay, grain, and flour. The officers are as follows: S. W. Owen, president; R. L. Harvey, vice-president, and D. T. Edwards, secretary and treasurer.

Southworth & Co., of Toledo, Ohio, write us August 11: "August, 1914, will go down in clover history for the \$2 advance made during the first 10 days of the month. Dry weather and war started the shorts on the run, and the same reasons held the bears in check. Recent rains will be great help to second seed crop. Prices, with one exception, the best on record, should attract considerable seed to market after harvest."

ASSYRIAN CORN

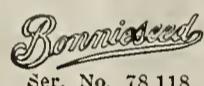
Experiments have been made by Dr. W. H. Young of Eldora, Iowa, with Assyrian corn, of which a few grains were given him by a peddler some years ago in the far-off land of Assyria.

Assyrian corn is not unlike the field corn of Iowa, only that enclosed in the outer husk lie the kernels, neatly imbedded in a smaller covering, each kernel wrapped in a separate compartment. Experiments have been successful in causing the ears to be of greater length and the kernels more numerous.

SEED TRADE-MARKS REGISTERED

The following illustrated trade-mark for seeds was registered with the Trade-Mark Bureau of the U. S. Patent Office during the past month:

"Bonnieseed" grass, vegetable, flower and farm



Ser. No. 78,118.

seeds. Weeber & Don, New York, N. Y. Filed May 7, 1914. Serial No. 78,118. Published July 7, 1914. See cut.

DETERIORATION OF CLOVER SEED VITALITY

Experiments to determine the vitality of clover seed were recently made known in a bulletin issued by Professor Pammel of the State Agricultural College at Ames, Iowa. For the purpose of experimentation, samples of commercial seeds for 1910, 1911 and 1912 were secured and stored in paper envelopes and tin boxes.

Alsike clover seeds showed no great deterioration in three years, the highest germination of three-year-old seed being 95 per cent and the lowest 70 per cent. The highest for two-year-old seed was 92 per cent and the lowest 68 per cent, while the highest for one-year-old seed was 96 per cent and the lowest 69 per cent. Three-year-old alfalfa seed seemed to show a loss of five to eight per cent and red clover seed revealed about the same results.

A PLANT THAT IN ITS REALM, IS KING

BY N. L. WILLET.

Last year we had in the South a new velvet bean—the Chinese—which Government experts pronounced as being the best of all the tribe. This year, however, we have still another new one, with a record still more remarkable.

The North has no equivalent for this leguminous forage plant. Among all the legumes, the velvet bean makes the most forage, the most humus matter and stores the most nitrogen through its root system in the soil. It has been rightly called, therefore, the king of the legumes.

Twenty years ago we began with the speckle velvet bean; five years ago came the white Lyon, next year the early white Yokohama, last year the white Chinese and this year the early speckle, or one-hundred-day speckle.

Some years ago a Georgia peach man planted speckle velvet beans in his orchard. The vines ran all over and actually hid his trees. He wrote me in great alarm, thinking he had lost his orchard. I told him to wait till frost! This gives some idea of the capacity that these beans have for running (20 to 30 feet), and for foliage making.

The only means for making velvet beans a hay proposition is to plant thick—say one bushel to the acre and broadcast, and then cut by September 1. The yield should be more than double that of cow

peas. But as a grazing matter, the velvet bean certainly has no equal. We usually plant in early spring, one peck to the acre, in corn, 3 feet by 4 feet, and turn in cattle (who eat beans and vines) from frost to February. We then turn under the stubble which stores so much nitrogen from the air that the following corn crop, without the use of nitrogen guano, is increased ten bushels per acre. The pods of these beans are as big as your thumb, and contain four or five beans. The speckles are round and are about three times the size of those on soy beans; the white beans are large, flat and resemble lima beans. The pods grow in clusters. I have seen clusters weighing two pounds each when green. These vines and beans, when grazed, give a balanced, perfect ration.

The Chinese bean (white) is a month earlier than speckle, and is an immense producer. It should mature in Georgia, Alabama and Mississippi. The white Yokohama matures, though with less foliage but with not less beans, in North Carolina and Kentucky. It should be tried out largely this year in that latitude. The early speckle, or one-hundred-day speckle, is larger than the late speckle, and seems to be the earliest of the lot. They have ripened beans in August in Georgia. Planted here at Augusta, Ga., early in May, they had green pods two inches long by June 10, while the late speckle—long a leading crop in Florida and southern Georgia, are a six months proposition, though early speckle ripens in less than four months.

The North should test out the Yokohama and the early speckle velvet beans, both as a hay crop (thickly sown), and as a Winter, grazing, forage proposition.

All of these beans do best with a support. A quart of scrub corn seed per acre, as strewn over the ground, serves best as a host plant.

The Baltimore & Ohio Railroad has instituted a rate on grain insurance in Baltimore of 25 cents per \$100 unit, as against a former rate of \$2.50. This low cost will bring a great bulk of storage grain to that city.

SEEDS

Grain, Clover and Grass Seeds,
CHAS. E. PRUNTY,
7, 9 and 11 South Main St. SAINT LOUIS



NO CHARGE
FOR BAGS

EASY TO DISPLAY EASY TO HANDLE EASY TO SELL

NO WASTE—NO DIRT

Meet Requirements of State Seed Laws

PURISCO SEEDS

IN PROTECTED PACKAGES
HIGH PURITY STRONG GERMINATION

TIMOTHY SEED

Packed in 1 bu. cotton bags—3 one-bushel cotton bags to the bale.

RED CLOVER—ALFALFA—ALSYKE

Packed in $\frac{1}{2}$ bu. and 1 bu. cotton bags—4 half-bushel or 2 one-bushel bags to the bale.

Recleaned and Packed by THE ILLINOIS SEED CO., CHICAGO

The ALBERT DICKINSON COMPANY

GRASS SEEDS FIELD

To Meet Demands Of

PURE SEED LAWS

Chicago

Minneapolis

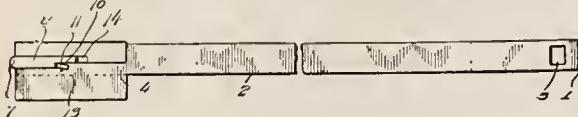
GRAIN TRADE PATENTS

Issued on July 7, 1914

Rasp for Clover-Hullers and the Like.—Ovid Crepeau, South Bend, Ind. Filed December 13, 1913. No. 1,102,980.

Car-Seal.—Edgar E. Jameson, Sunny Side, Miss. Filed December 19, 1913. No. 1,102,512. See cut.

Claim.—A seal comprising a strip having an aperture formed adjacent one end thereof, and a widened section formed at the opposite end thereof, said widened section having the opposite longitudinal portions thereof bent



inward upon the body of such section to form a casing, one of said bent portions having a relatively long tongue formed therewith, said tongue having a transverse fold adjacent one end, a spur projecting in a direction opposite to the mouth of the fold, said tongue being adapted to pass through the opening in the strip when in sealing position.

Issued on July 14, 1914

Conveying System.—Gilbert Tollefson, Bagley, Minn. Filed June 26, 1913. No. 1,103,709.

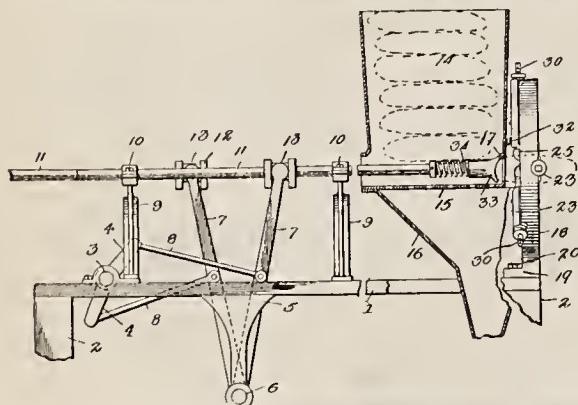
Issued on July 21, 1914

Manufacture of Alfalfa Products.—Mark C. Rich, Hot Springs, S. D. Filed November 28, 1911. No. 1,104,136. See claim.

Claim.—That improvement in the treatment of alfalfa, which consists in cutting it before it has become woody and fibrous, then curing and heating it to prevent bleaching, and then grinding it.

Corn-Sheller.—John Kiovsky, Astoria, N. Y., assignor of two-thirds to Richard Kiovsky, Springfield, Mass., and Frank Kiovsky, New York, N. Y. Filed August 14, 1912. No. 1,104,677. See cut.

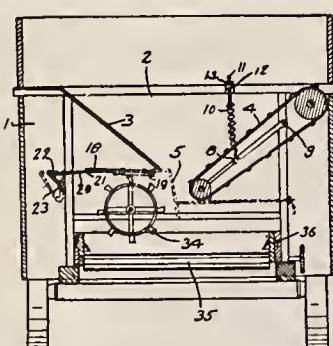
Claim.—In a corn sheller, a hopper having an opening in its side, a shaft mounted for reciprocation in the hopper in alignment with the opening and a spring



pressed head slidably mounted on the shaft, and having a bell mouthed end portion which normally lies in advance of the end of the shaft and which is adapted to resiliently present the ears of corn to the sheller.

Automatic Feeder for Grain-Separators.—William Clyde Leonard, Walla Walla, Wash., assignor of one-half to A. F. Brockman, Bickleton, Wash. Filed October 2, 1913. No. 1,104,122. See cut.

Claim.—Automatic feeding apparatus for grain separators comprising in combination, an inclined hopper board, a draper belt inclined oppositely to said hopper



board and forming a feeding space with said hopper board, said belt being mounted for bodily pivotal movement about its upper end, and spring means adapted to hold said belt in position to provide a minimum feeding space when the belt is unloaded.

Apparatus for Producing and Controlling Moistened Air in Malting-Drums. Ludwig Topf, Erfurt, Germany. Filed January 12, 1912. No. 1,104,717.

Issued on July 28, 1914

Mechanical Drier.—William E. Prindle, Manitowoc, Wis. Filed February 28, 1912. No. 1,104,929.

Issued on August 4, 1914

Bean-Sorting Machine.—Park L. Day, Frazee, Minn., assignor of one-half to Frank Kiene, Kennedy, Mich. Filed April 20, 1914. No. 1,105,890.

Treatment of Seed-Grain.—Henry Ernest Fry, Godmanstone, Dorchester, England, assignor to Charles Edward De Wolf, London, England. Filed October 10, 1913. No. 1,106,039. See claim.

Claim.—The process of treating grain consisting of placing the grain in a solution of nitric acid and passing an electric current through the solution substantially as described.

HAY, STRAW AND FEED

Beegle Brothers have opened a new feed store at Pomeroy, Ohio.

Roy Leavitt has sold his feed store at Gering, Neb., to T. A. Jones.

Frank A. Gustafson has purchased the feed business of Fred Cram at Sargent, Neb.

A. E. Judd has purchased the store of the Main Hay & Feed Company at Redlands, Cal.

F. A. Hewitt, of Napa, Cal., has purchased the hay, grain and feed business of L. A. Pritchard at St. Helena, Cal.

St. Clair & Lynn, of Salida, Cal., have opened their hay and coal warehouse for business, handling alfalfa, alfalfa meal, hay and coal.

The Sturges Hay & Grain Company, of Phoenix, Ariz., has filed an amendment to its charter, changing its name to the Phoenix Seed & Feed Company.

Chas. Eyler, of Ponca, Neb., has disposed of his elevator business and will engage in the feed business, having purchased the feed store of J. P. Nelson.

McMahan Brothers, of Valparaiso, Ind., have been incorporated with a capital stock of \$10,000, to deal in hay, grain, etc. The directors are Willis C. McMahan, Zenas J. McMahan and B. D. McMahan.

Capitalized at \$10,000, P. Stallknecht & Co., Inc., have filed a charter at Brooklyn, N. Y., to deal in hay, grain, etc. The incorporators are Julius Henriksen, Elizabeth B. Stallknecht and Peter Stallknecht.

F. Williams, Inc., of New York, N. Y., has been incorporated with a capital stock of \$100,000, to deal in hay, straw, grain, etc. The incorporators are Frank Williams, Paul J. Franghaidi and Milton Peters.

A charter has been granted to Robt. H. Scott & Son, Inc., of New Rochelle, N. Y., capitalized at \$20,000, to deal in hay, feed, etc. The incorporators are Jessie A. Scott, Robert H. Scott and Robert C. Scott, Jr.

The Carlisle Commission Company, of Kansas City, Mo., has between 500 and 600 cars of hay in transit at present, which means between four and five miles of hay, an estimate secured by the measurement of car lengths and couplings. The firm advises that it has three miles ordered for future delivery with more miles about to be added.

The hay, grain and seed firm of Cole & Mandeville, operating a store at Ithaca, N. Y., has dissolved partnership, Grant S. Cole, senior member of the firm, retiring from the business. Arthur J. Mandeville and his brother, Theron Mandeville, will operate the business under the name of Mandeville Brothers, while Mr. Cole retains his hay plant on West Port Street.

The Public Service Commission of Maryland has made a new ruling regulating the practices of the Terminal Warehouse Company at Baltimore whereby hay and straw stored in the terminal warehouse will remain there for four days free of charge, and thereafter it will be subject to a charge of 15 cents a day a ton for the first five days, 15 cents a day for the second five days, 20 cents a day for the third five days and 20 cents a day for the fourth five days, and thereafter the charge is to be \$1 a day per car-load.

GRASSES OF FLORIDA

The state of Florida produces quite a variety of grasses, the best for pasture being the native Bermuda and paspalum, generally known as carpet grass, while marshy districts are found to produce several other species. In the southern part of the state the Japanese clover flourishes and is said to contribute a large measure of productiveness to the pastures on which it is allowed to grow. These grasses suffer annually from fires that sweep over wide areas, destroying practically every thing in their path but the native wire grass.

Throughout the central portions of the state, natal grass grows quite extensively and, where the ground has been placed in a good state of cultivation, the growth of natal grass is said to be so persistent that it crowds out Bermuda grass. From one to two and a half tons per acre have been taken at a single cutting under favorable circumstances. As the feeding value is said to be a little higher than timothy, the cultivation of natal grass is well worth while.

Rhodes grass requires a different variety of soil from the natal grass and the Experiment Station at Gainesville has demonstrated that both grasses

can be grown in most sections of the state south of Gainesville, provided soil conditions are favorable.

THE CHICAGO HAY MARKET

Albert Miller & Co., of Chicago, say concerning the hay market under date of August 7: "No difference now between old and new timothy as to prices. In fact, buyers prefer the new, all grades meeting a ready sale. Arrivals not nearly sufficient to supply the demand, which is good for both local and shipping trade. Prompt shipments bound to bring satisfactory results. Arrivals of Kansas, Oklahoma and Nebraska prairie continue large, while demand is only fair. In fact, in order to move the large arrivals of the past week buyers have found it necessary to make liberal concessions. Arrivals of straw lighter but as trade is well supplied no improvement is as yet noticeable."

ENTER SWEET CLOVER

Only within the last two years has sweet clover gained any prominence as a feed crop. It had plenty of prominence before that time but it was chiefly as a noxious weed that state legislators were asked to control by laws making its destruction obligatory. Now, however, accidental observation, followed by careful examination at various experimental stations, have proved sweet clover to be one of our most valuable legumes, in the dry state or in silage nearly as valuable as alfalfa, and as pasture even more valuable, as cattle, sheep, or hogs can feed upon the green clover without any danger of bloat.

The greatest objection stockmen have to sweet clover is the difficulty in getting stock to learn to eat it. After they have acquired the taste for the cumarin, which lends the bitter taste to the plant, they will leave other clovers and grasses for it and will pick it out of mixed hay. In more than half the states of the Union cattle are now being fed regularly on sweet clover.

Experiments are being conducted to grow a plant with less of the cumarin principle present so that it will be more palatable, but the drug is well known for its medicinal properties in intestinal disorders and it is that which reduces the danger of bloating.

The Kansas State Board of Agriculture has recently issued a bulletin on the value of sweet clover, containing several interesting tables of its nutrient value as compared to other forage foods. The first of these gives the average percentage composition of different feeds and the values per ton.

Kind of Forage.

	Number of analyses.	Water.	Ash.	Protein.	Crude fiber.	Nitrogen-free extract.	Ether extract (fat).
Fresh sweet clover...	7	77.0	1.8	3.9	6.9	9.4	0.6
Fresh alfalfa.....	23	71.8	2.7	4.8	7.4	12.3	1.0
Fresh red clover....	43	70.8	2.1	4.4	8.1	13.5	1.1
Sweet-clover hay....	6	7.7	7.5	13.3	26.9	42.6	2.1
Alfalfa hay.....	21	8.4	7.4	14.3	25.0	42.7	2.2
Red-clover hay....	38	15.3	6.2	12.3	24.8	38.1	3.3
Timothy hay.....	68	13.2	4.4	5.9	29.0	45.0	2.5
Cowpea hay.....	8	10.7	7.5	16.6	20.1	42.2	2.2

The second table shows the digestible nutrients in sweet clover and other forage crops and feeds and the values of same per ton.

Digestible nutrients in 100 pounds.

Kind of Forage or Feed.

	Dry matter.	Carbohydrates.	Ether extract.	Value per ton.
Sweet-clover hay....	92.4	9.9	38.1	\$18.49
Alfalfa hay.....	91.6	11.0	39.6	20.16
Red-clover hay....	84.7	6.8	35.8	14.12
Timothy hay.....	86.8	2.6	43.4	9.80
Cowpea hay.....	89.3	10.8	38.6	19.75
Wheat bran.....	88.1	12.2	39.2	22.80
Shelled corn.....	89.1	7.9	66.7	4.3

A great many farmers have reported successful experiments in feeding sweet clover to live stock, but relatively few of the experiment stations have performed definite feeding experiments to determine the exact value of sweet-clover hay as compared with other crops. The Wyoming Experiment Station, however, performed an interesting experiment with lambs. A number of pens of from 10 to 40 lambs each were fed different mixtures of feeds for a period of two weeks. Those receiving sweet-clover hay, corn, and a small amount of oil meal made an average gain of 30.7 pounds per head as compared with 20.3 pounds for those receiving native grass hay, oats and oil meal. Those receiving alfalfa and corn made a gain of 34.4 pounds per head. The de-

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

125

Tails of the experiment with four of the pens of lambs are given in the following table:

Pounds of feed required for 100 pounds of gain.

Ration.	Number of lambs.	Average gain per head in pounds for 14 days.	Sweet-clover hay.	Native hay.	Alfalfa hay.	Corn.	Oats.	Oil meal (old process).
Sweet-clover hay, corn, oil meal.	10	30.7	637.5	.....	293.2	.....	20.5	
Native grass hay, oats, oil meal	40	20.3	606.7	.....	460.5	25.0		
Alfalfa hay, corn	10	34.4	557.7	261.6	.....	.....
Alfalfa hay, corn	40	34.3	557.3	286.5	.....	.....

The sweet-clover hay used in this experiment was stated to be stemmy in its nature and more than a year old. It is of interest to know that in spite of its stemminess the hay was eaten up close by the lambs.

At the Iowa Agricultural College a grazing experiment with young shoats was made comparing sweet clover and red clover. The details of this experiment are shown in table IV:

Kind of Pasture.	Number of pigs	Grain required for			Gain for 100 pounds of entire gain (in addition to pasture).	Pounds.	Pounds.	Pounds.
		per acre	Daily gain per acre.	Pounds.				
Sweet clover	18	1.02	2,594	338				
Red clover..	15	1.13	2,394	333				

In practical tests the value of sweet clover has been demonstrated, as when steers from western Iowa, fattened in sweet-clover pasture, have brought a premium of \$1 per hundredweight over those from the same locality, fattened on ordinary grass pasture.

BRITISH HAY PRODUCTION

The total production of hay from clover, sainfoin, etc., in England and Wales in 1912, according to recent consular reports, amounted to 2,031,052 tons, an increase of 70,930 tons over the crop for 1911; these crops were obtained from an area of 1,554,909 acres in 1912 and 1,637,432 acres in 1911. From permanent or meadow grass the resulting crops of hay in England and Wales were 6,094,432 tons in 1912, against 4,343,096 tons in 1911. The total crop of all kinds of hay was 8,125,484 tons in 1912, as against 6,303,218 tons in 1911.

Statistics show no British hay exported from the country, and comparatively small amounts imported. There were 70,583 tons received in 1912, as against a total of 121,516 tons in the previous year. In 1912 there were re-exported from the United Kingdom 2,553 tons, as against 935 tons in 1911. The imports of hay into London in 1911 amounted to 32,723 tons, of which 11,560 tons were received from the United States. In 1912, London imported 6,543 tons of hay from the United States.

THE KANSAS CITY OUTLOOK

The Carlisle Commission Company, wholesale hay and grain dealers of Kansas City, Mo., say in August letter: "The old world is now struggling for supremacy. It would seem that nations, like individuals, the older they grow the more they should know and be more peaceful and conservative. War frightens capital and wastes wealth. The United States is a peace-loving nation, and we will be called upon to supply a great deal of food and forage needed by the Europeans. We are too busy with peaceful, profitable pursuits to engage in war. Temporarily there will not be much shipped, not even wheat, but later they will need our wheat and meat and some corn. We hardly look for any amount of hay to be exported. Possibly Canada may ship some of her surplus which she has been sending to the United States. On account of the embargo on wheat shipments, more cars will be provided for hay, so that now we do not look for any great car famine."

THE ST. LOUIS HAY TRADE

Under date of August 7, the Martin Mullally Commission Company of St. Louis, Mo., states: "Receipts of hay during the past week were fair in amount, being 237 cars as compared with 232 the preceding week, and the offerings of hay consisted mostly of prairie. Tame hay is in light offerings and is ruling firm and higher; buyers have been taking what little timothy and clover mixed arrived during the week at advanced prices, leaving the market well cleaned up right along and practically bare of all grades at the close today, and our market is in an excellent condition for fresh arrivals, and we advise prompt shipments. Pure clover and heavy clover mixed is particularly scarce and wanted. Choice clover if offered would sell from \$18.00 to \$19.00 per ton."

"Prairie hay has been ruling weak, owing to the excessive offerings. Though the demand is right good at the prevailing prices for No. 1 and choice prairie hay free of weeds. Low grades and weedy prairie have been in limited demand and moving very slowly up until today; today, however, buyers are buying freely of most all grades of prairie. The increased demand today for prairie hay is caused

by the light offerings and advance in price of tame hay. We look for our market to do better on prairie hay as the prevailing prices here are too low in proportion to the price of tame hay, and we advise prompt shipments, as we believe that shipments made now will arrive here in a good time to sell at a higher range of prices than the present ones.

"Alfalfa hay is ruling firm and higher; receipts have been running light and buyers have been taking everything offered on arrival at a higher range of prices, causing a free movement, and the market now is practically bare of all grades and in a good condition for fresh arrivals, and we advise prompt shipments."

ALFALFA A VALUABLE HORSE FEED

Government experiment stations in Utah and Illinois have been conducting quite extensive demonstrations to prove the value of alfalfa as a feed for horses and it has been found under varying tests that in the use of alfalfa as a roughage, horses maintain their weight more easily than they do when fed timothy. Illinois experiments showed that less grain is necessary to prevent loss of weight when alfalfa hay is fed as the roughage part of a ration for farm horses hard at work, than when timothy is used.

If horses are overfed with alfalfa, good results

will not follow. This proved true in a number of cases of overfeeding, but where the correct amount was used, the appearance and condition of alfalfa-fed horses was better than those fed with timothy and the cost of maintenance was less.

"Price and Quality Right"

DYER & CO.

HAY Merchants

Write us for delivered prices
on ALFALFA

705 Live Stock Exchange, KANSAS CITY, MO.

ALFALFA

Also All Other Kinds of Hay

Write —

Kansas City Office for HAY—EAST
Memphis Office for HAY or OATS—SOUTHEAST
Oklahoma City Office for HAY or OATS—SOUTH

SHOFSTALL HAY AND GRAIN CO.

KANSAS CITY, MO.
600-602 Live Stock Exchange

MEMPHIS, TENN.
Tennessee and Nettleton Ave.

OKLAHOMA CITY, OKLA.
307 Mercantile Bldg.



Carlisle Commission Co.

(Established 1889)

WHOLESALE HAY AND GRAIN

736-738-746 Live Stock Exchange Building

KANSAS CITY, MISSOURI

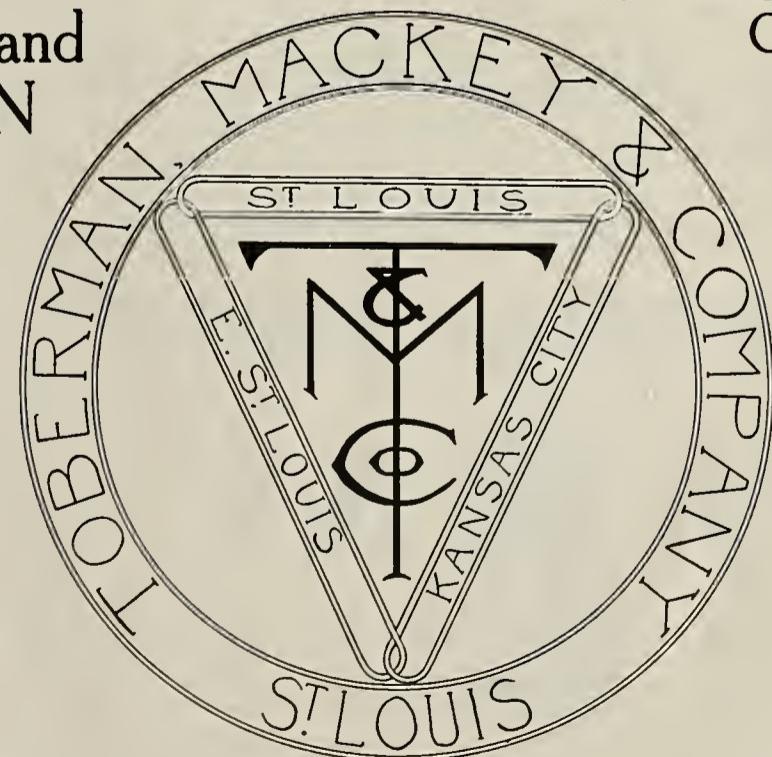
(The World's Greatest Hay Market)

If you have Hay we want it—if you want Hay we have it. We have unequalled facilities, the largest established trade and outlet. Liberal advances on consignment. Kansas City handling charges the lowest, service the best.

GET OUR DELIVERED PRICES

Consign your
HAY and GRAIN

to



ST. LOUIS

"The Fastest Growing
Commission
House in
America"

KANSAS CITY

HAY

DIRECT FROM PRODUCER TO CONSUMER

We have warehouses on Frisco, Mo. Pacific, M. K. & T., and K. C. Southern Railroads

Buy direct from producer

In business since 1888



THIS half-tone cut is of our own alfalfa fields (over one thousand acres). Land owned and operated by us. No finer grown. Can be witnessed during several harvests annually. Our prices lowest, quality considered. Give us your orders.

Huffine & Co.,

750-752 Live Stock Exchange Building
KANSAS CITY, MO.

Mills at Osborne, Kansas
Elevators on Mo. Pac.

Consignments
a
Specialty

Correspondence
Solicited

"Get Our Quotations"

Member National Hay Association
Member Kansas City Hay Dealers' Association
Member Millers' National Federation



WHOLESALE AND COMMISSION

HAY, GRAIN AND MILL PRODUCTS

References:
Home State Bank, Kansas City, Kan.
First National Bank, Osborne, Kan.
Mercantile Agencies

Office: 901-905 N. 3rd St.

Warehouse: 900-906 N. 2nd St.

KANSAS CITY, KAN.

USE ROBINSON'S CIPHER

We
Buy
or
Sell

J. A. BRUBAKER & COMPANY

ESTABLISHED 1881

ALFALFA
TIMOTHY
PRAIRIE

HAY

Both high class Hay and Men command a premium

WHY TAKE CHANCES?

Your Consignments or Buying Orders Solicited

KANSAS CITY

MISSOURI

UNIVERSAL GRAIN CODE

(and Mill Feed Supplement)

COMPILED FOR USE OF

GRAIN and MILLING TRADES

OF THE

United States and Canada

This Code meets the present day requirements of the grain and milling trades—is up-to-date in every respect and thoroughly covers the changes in methods and business that have come into use of late years.

telegraph tolls and misunderstandings in telegraphing.

The Universal Grain Code is being used by many hundreds of the most active firms in the country.

The translation expressions and tabulated matter is a great improvement upon any public grain and milling code now in use, and is an assured factor in saving

A list of Code Users is sent gratis with every copy of the Universal Grain Code, the names and addresses being published free of charge.

Send for a Copy Now. Price \$3.00.

MITCHELL BROTHERS PUBLISHING CO.
431 S. Dearborn Street

CHICAGO, ILL.

THE AMERICAN ELEVATOR AND GRAIN TRADE

MACHINERY

THE GOVERNMENT CROP REPORT

The Crop Reporting Board of the Bureau of Crop Estimates makes the following estimates for the United States from reports of its correspondents and agents:

		Condition.		Aug. 1, 1914.	Aug. 1, 1913.	July 1, 1913.	10-yr.av. 1914.
Crop.	Acres.						
Winter wheat	35,387,000	....	....	....	94.1		
Spring wheat	17,990,000	75.5	74.1	80.1	92.1		
All wheat	53,377,000	....	....	....	93.4		
Corn	105,067,000	74.8	75.8	81.9	85.8		
Oats	38,383,000	79.4	73.8	80.9	84.5		
Barley	7,528,000	85.3	74.9	82.1	92.6		
Rye	2,533,000	....	....	....	92.9		
Buckwheat	796,000	88.8	85.5	89.1	....	
Flax	1,927,000	82.1	77.4	82.6	90.5		
Rice	704,800	87.6	88.7	88.4	86.5		
Hay (tame)	48,400,000	86.7	81.8	83.9	80.8		

The estimated yields indicated by the condition of crops on August 1, 1914, and final yields in preceding years, for comparison, follow:

Crop.	Yield per Acre.	Total Production in Millions of Bushels.		1909-1913 aver.	Aug. 1, 1914.	July 1, 1913.	aver- age.
		1909	1913				
Winter wheat	*19.1	15.6	*675	653	523	441	
Spring wheat	13.1	13.3	236	274	240	245	
All wheat	17.1	14.7	911	927	763	686	
Corn	25.1	25.9	2,634	2,917	2,447	2,708	
Oats	30.0	30.6	1,153	1,197	1,122	1,131	
Barley	26.9	24.3	203	211	178	182	
Rye	*16.8	16.1	*43	...	41	35	
Buckwheat	21.5	20.5	17	...	14	17	
Flax	8.7	7.8	17	18	18	20	
Rice	33.9	33.3	24	24	26	24	
Hay (tm) tons	1.44	1.34	69	...	64	66	

*Preliminary estimate.

†Interpreted from condition reports.

Details for important crops in principal States follow:

At Carthage, Mo., a jubilee was held recently in celebration of the greatest wheat harvest Jasper County has ever known. The Governor of the State and other officials participated.

Of the 1,000 different varieties of rice grown in the Philippines the Bureau of Agriculture is working to select the best dozen or so and encourage the natives to grow only the most productive varieties.

Forty-one vessels have been engaged to carry the wheat and barley crop of the Pacific Coast to Europe. The lowest rate so far reported to the United Kingdom is 25s 6d, while the highest is 31s 6d. This is the largest number of charters placed at this season since 1902.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE

A 15,000-bushel elevator. Best grain station in the state. Good point for "Midget" Marvel mill in connection. L. N. CRILL SEED CO., Elk Point, S. D.

FOR SALE

On account of retiring from business, we are offering fourteen elevators in Iowa and southern Minnesota for sale, either singly or as a whole. Write us. DE WOLF & WELLS CO., Spencer, Iowa.

FOR SALE

A 20,000-bushel capacity modern elevator with all necessary cleaners, feed grinder and flour house; located near water, new dock 146 feet and switch track to hold six cars at a time. Reason for selling, owner wants to move to California. E. HAUTER-BROOK, 1272 E. Walnut St., Green Bay, Wis.

FOR SALE

A 35-horsepower Foos Gas Engine, slightly used. Priced to sell—write us. CANADIAN MILL & ELEVATOR CO., El Reno, Okla.

FOR SALE

Machinery and equipment complete of 1,500-barrel mill, Nordyke & Marmon Sifter System; is all nearly new, having been used only two years. Will sell all together, or any part of same. The equipment includes 150-horsepower Hamilton Corliss Engine and one 1,000-horsepower Reynolds Corliss Engine, vertical. HARTZ MACHINERY CO., 316-326 N. 17th St. Philadelphia, Pa.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED

Elevator with coal, lumber or other business, in exchange for improved farm or wild land. Give full particulars. BOX 185, Independence, Iowa.

WANTED

Competent man with some grain, feed and farm implement experience, to manage country warehouse. One or two thousand dollars capital required. F. S. POWELL, Director, Lackawanna, N. Y.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

WANTED

Off Grade Wheat, also Kaffir Corn, Bran and Middlings. Send samples and quote prices delivered Boston points. Sight draft terms. Always in the market. THE PARK & POLLARD CO., 46 Canal St., Boston, Mass.

POSITIONS WANTED

FOR SALE

50-horsepower two-cylinder horizontal Badger Gasoline Engine, \$485. One hundred other sizes and styles. State your power needs. BADGER MOTOR CO., Milwaukee, Wis.

POSITION WANTED

As elevator man to buy and handle grain for some elevator or milling company. Have had good experience. Understand gasoline engines well. For further information, write W. R. LEINICKE, Ava, Ill.

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given Phone Harrison 7228 Orders in Futures
Special Attention

carefully executed

FOR THOSE WHO ARE INTERESTED IN GRAIN

We have prepared three Wagner 1914 crop raising season circulars on wheat, corn and oats, containing weather data, causes of damage, former crop raising history, complete statistics of old crops and consumption. Sent FREE. Mention this paper. Also ask for Grain Investments.

E. W. WAGNER & CO.
Grain, Security and Cotton Investments
BOARD OF TRADE - CHICAGO
Est. 27 Years — References: All Trade Bureaus

BAGS

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

PATENTS
TRADE MARKS, COPYRIGHTS
AND CORPORATIONS
RICHARD J. JACKER
PATENT ATTORNEY
ESTABLISHED 1892
Monadnock Block CHICAGO, ILL.

YOU
are interested in
Cincinnati
—as—

it is the best cash market
in the country for Hay
and Grain, but you must

Consign

to get best results.

Our business is strictly
commission and we guarantee
satisfactory service.

A copy of actual transactions
in the Cincinnati market will be sent daily
upon request.

The Fitzgerald Bros. Co.

Members the Cincinnati Chamber of Commerce

CINCINNATI - - - OHIO

THE SYKES COMPANY

930 West 19th Place, Chicago

MAKERS OF

FIREPROOF WINDOWS

We manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and
Metal Roofing
For Grain Elevators

And take contracts either for material alone or job completed.
Write us for prices. We can save you money.

PRODUCE EXCHANGE

TOLEDO

GRAIN RECEIVERS

When "Seedy"
Try
C. A. KING & CO.
Toledo Leads World

"SEND IT TO ZAHM"

THAT Consignment of Wheat, Oats, Corn or Seed.
THAT Order for Futures—Toledo or Chicago.
TOLEDO is the real market for Red Clover,
Alsike and Timothy futures.

J. F. ZAHM & CO.
TOLEDO (Here since 1879) OHIO
ASK FOR OUR DAILY RED LETTER — FREE

Clover Seed INVESTMENTS

Booklet of facts and figures of interest and value to the trade.
Just issued.

FREE ON REQUEST.

Southworth & Co.
Produce Exchange, Toledo, O.

Oats Are Our Specialty
The Paddock Hodge Co.
Receivers — TOLEDO — Shippers

You WILL do better in Toledo —
You MAY do better with

W. A. RUNDELL CO.
GRAIN, MILL FEEDS, SEEDS
WHY NOT TRY IT?

TOLEDO OHIO

H. W. DE VORE & CO.
Wheat, Corn, Oats, Seeds

OUR unexcelled service is the result of twenty-six years experience in the grain business in this market. SEND us your consignments and orders in futures.

PRODUCE EXCHANGE, Toledo, Ohio
Members Toledo-Chicago Exchanges.

JOHN WICKENHISER & CO.
Wholesale Grain Dealers
TOLEDO, OHIO

We make track bids and quote delivered prices.
Solicit consignments of Grain and Clover Seed.
Members Toledo Produce Exchange and Chicago Board of Trade

MERCHANTS' EXCHANGE

ST. LOUIS

GRAIN RECEIVERS

RECEIVERS
W.L. GREEN COM. CO.
ST. LOUIS
SHIPERS
EXPORTERS
OF GRAIN

Nanson Commission Co.
(INCORPORATED)
GRAIN AND HAY

202 Chamber of Commerce
ST. LOUIS Consignments a Specialty
Write Us for Full Information on St. Louis Markets

ROPP'S CALCULATOR — Invaluable for Grain Dealers. Tables show at a glance the value of wheat, corn, rye, oats, barley, seeds, etc., at all market prices per bushel. Trade discounts, stock tables, capacity tables, short-cut arithmetic. Solves all grain problems with lightning rapidity. Price \$1.25.

Ship Your Hay, Grain and Seeds to
MARTIN MULLALLY COMMISSION COMPANY

We make a Specialty of Track and Sample Sales.
Handle on Consignment Only. Careful execution of orders for futures.
Nos. 405 and 406 Chamber of Commerce - ST. LOUIS, MO

Toberman, Mackey & Company

Fastest Growing Commission House in America.
Can handle your Consignments in St. Louis and Kansas City.

GRAIN, HAY AND SEEDS

ST. LOUIS

KANSAS CITY

"THE CONSIGNMENT HOUSE OF ST. LOUIS"
GRAIN, HAY & GRASS SEEDS
Picker & Beardsley Com. Co.
118 NORTH MAIN STREET.

GFFE & CARKENER CO.

RECEIVERS
GRAIN, HAY AND SEEDS

106-107 Merchants Exchange
ST. LOUIS

W. C. GFFE G. S. CARKENER G. C. MARTIN, JR.
K. C., Mo., Office, 101-102 Board of Trade

Experienced Advertisers Know

that the "American Grain Trade" is preserved for reference by elevator men, country grain shippers and grain receivers at the terminal markets long after other journals have been thrown away.

BOARD
OF
TRADE

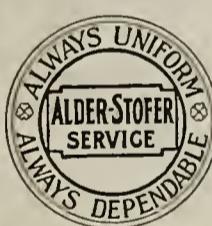
PEORIA

GRAIN
RECEIVERS**W. W. Dewey & Sons**
GRAIN COMMISSION26 Chamber of Commerce, PEORIA, ILL.
Prompt personal attention given to Consignments and orders for grain.T. A. Grier
T. A. GRIER & CO.
Grain Commission
Merchants and Shippers
Get best possible results by careful and personal attention given to all consignments.
Board of Trade Peoria, Ill.**RUMSEY, MOORE & CO.**
GRAIN COMMISSION
Board of Trade Bldg. PEORIA, ILL.**P. B. & C. C. MILES**
Established 1875 Incorporated 1910
PEORIA, ILL.Handling Grain on Commission
Our SpecialtyA. G. TYNG, Jr. D. D. HALL
TYNG, HALL & CO.
Grain and Commission
Merchants
Rooms 33 and 35 Chamber of Commerce
PEORIA, ILLINOISC. W. Buckley. Thos. J. Pursley
Buckley, Pursley & Co.
COMMISSION MERCHANTS
GRAIN, HAY AND SEEDS
PEORIA, ILL.
References: First National Bank, Peoria, Ill.
Commercial German National Bank, Peoria, Ill.LOUIS MUELLER L. L. GRUSS
MUELLER GRAIN CO.
RECEIVERS and SHIPPERS
GRAIN
We Solicit Your Consignments of Grain and Hay
ROOM 39 CHAMBER OF COMMERCE
PEORIA, ILLINOISGood Prices and Quick Returns
TRY US
GEO. L. BOWMAN & CO.
Grain Commission
324 So. Washington Street PEORIA, ILL.

YOU can keep your name before the majority of those in the grain business with your card in these columns. Rates on application.

CORN
EXCHANGE

BUFFALO

GRAIN
RECEIVERSSPECIALIZING
ON CONSIGNMENT
FOR OVER
FORTY YEARS**ALDER-STOFER GRAIN CO.**
Chamber of Commerce Buffalo, N. Y.**WHY EXPERIMENT?**

Our Many Years as Consignment Specialists has taught us the value of experience in this field.

Consign us your next car... We'll show you what real "PUNCH" means in service.

L. S. CHURCHILL, President
G. W. BARTLETT, Treasurer**The Churchill Grain & Seed Co.**

Commission Orders Executed. Grain and Seed Bought and Sold

Offices: Buffalo, N. Y. Members
Toledo, Ohio New York Produce Exchange
Seed Warehouse: Toledo Produce Exchange
Located at Toledo, Ohio Buffalo Corn Exchange

L. E. HARMON, Pres.

GEO. F. BOOTH, Sec. and Treas.

BUFFALO CEREAL COMPANY
CEREAL MILLERSBuyers of White Corn, Yellow Corn
and White Oats.
BUFFALO, N. Y.**A. W. HAROLD**
GRAIN
BARLEY A SPECIALTY

717 Chamber of Commerce BUFFALO, N. Y.

Urmston-Harting Grain Company
BUFFALO, N. Y. :: INDIANAPOLIS, IND.Specializing on Consignments
of Grain to Buffalo
For cash offers enroute or track wire
Tipton, Ind.PRODUCE
EXCHANGE

NEW YORK

GRAIN
RECEIVERS**Heusch & Schwartz Co., Inc.****COMMISSION MERCHANTS**
Wheat---Corn---Oats---MillfeedsPostal Telegraph Bldg.
CHICAGOProduce Exchange
NEW YORK**BROOKLYN HAY & GRAIN CO.**HAY, STRAW AND GRAIN
COMMISSION MERCHANTS
ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

L. W. FORBELL & CO.
Commission Merchants

342 Produce Exchange NEW YORK

Try us with consignments of oats and corn.
We are Specialists in these grains and
are strictly Commission Merchants.

BOARD
OF
TRADE

CHICAGO

GRAIN
RECEIVERS

FINLEY BARRELL & CO.

Grain — Provisions

We will be pleased to mail our Weekly Grain Letter on application.

203 S. La Salle St. Chicago

OUR SPECIALTIES

Handling Consignments and Sales to Arrive.
Future Orders also Properly Executed.
When looking for Top Notch SERVICE send your business toF. M. BAKER & CO.
Long Distance Phone Wabash 5010 822 Webster Bldg., Chicago

WM. SIMONS, Pres. and Treas. WARREN T. McCRAY, Vice-Pres.



GEO. L. STEBBINS, Sec'y.

W. A. WERNER & E. E. RICE, Representatives

Gerstenberg & Company
COMMISSION MERCHANTSGrain Seeds and Mill Feed
Barley a Specialty
305-315 La Salle St., CHICAGO, ILL.HOOPER GRAIN COMPANY
OAT
ShippersOperate Atlantic and Grand Trunk Western Elevators
CHICAGO

J. Rosenbaum Grain Co.

(INCORPORATED)

GRAIN MERCHANTS

Chicago Ft. Worth

Terminal Elevators
KANSAS CITY, MO.

The personal attention kind of service counts

Walter Fitch & Co.

Insurance Exchange Building, Chicago

Our personal attention given to orders in futures and grain consignments.

W. K. MITCHELL, Mgr. Cash Grain Department

HELLO! HELLO!! HELLO!!!
In order to get the best results from a telephone conversation, you have got to have a good connection. Just so in the handling of your business. Connect with the firm that is a live wire; that will look after your interests; call for re-inspection when necessary; get good prices; make quick returns, and give you liberal treatment. In other words, make a connection with

ROSENBAUM BROTHERS, 77 Board of Trade, CHICAGO.
Send us your grain to be sold on consignment. Let us bid for it when you desire to sell to arrive. You'll make no mistake (either Toledo or Chicago). Let us hear from you.
PHONE. TELEGRAPH. WRITE.

F. E. WINANS & CO.

GRAIN AND FIELD SEEDS
COMMISSION MERCHANTSBarley, Oats, Wheat, Corn, Rye, Timothy, Clover,
Flax, Hungarian Millet

208 SOUTH LA SALLE ST., CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

Nye & Jenks Grain Co.

907-913 Postal Telegraph Bldg.,
Chicago, - Illinois

J. P. GRIFFIN & COMPANY

Grain Commission

79 BOARD OF TRADE

Long Distance Telephone Harrison 5693

CHICAGO

NORRIS & COMPANY

Grain Merchants

Room 42 Board of Trade CHICAGO

TELEPHONE HARRISON 627

Consignments and Hedging Orders Solicited.
Owners and Operators of the Norris Elevator, Chicago
Frank W. Hotchkiss, Howard Lipsey, Managers Domestic
Shipping and Receiving Department.

Clement, Curtis & Co.,

211 South La Salle Street
Chicago

announce the opening of a

CASH GRAIN DEPARTMENT

to be in charge of Mr. William Thayer, for many years connected with cash grain operations at the Chicago market

Service first will be the rule of the house.

Consignments solicited.

GRAIN
&
HAY
EXCHANGE**PITTSBURGH**GRAIN
RECEIVERS**W. F. Heck & Company**RECEIVERS AND SHIPPERS IN CAR LOTS
MIXED CARS OUR SPECIALTY**Grain, Hay, Straw and Mill Feed**

Room 727, Wabash Bldg., Pittsburgh, Pa.

Members: National Hay Association
Grain Dealers' National Association
Pittsburgh Grain and Flour ExchangeUse Robinson's
Code.

Established 1879

J. W. SMITH & COMPANY

Pittsburgh, Pa.

Offer the very best facilities for the marketing
of corn and oats. We work interior
points exclusively.**D. G. Stewart & Geidel**GRAIN, HAY and FEED
RYE A SPECIALTYOffice 1019 Liberty Street Pittsburgh, Pa.
Proprietors Iron City Grain Elevator. Capacity 300,000 bu.BOARD
OF
TRADE**CAIRO**GRAIN
RECEIVERS**MAGEE GRAIN CO.****Grain Receivers and Shippers**Get in touch with our consignment
service or sell us direct.
Our Daily Card Bids on Request.

CAIRO

ILLINOIS

The Book of WrinklesTHIS IS A COLLECTION, IN BOOK FORM, OF A LARGE NUMBER OF HANDY AND
LABOR-SAVING DEVICES FOR GRAIN ELEVATORS AND FLOUR MILLS. A 136-PAGE
BOOK, FULLY ILLUSTRATED. PRICE \$1.00.MITCHELL BROS. PUBLISHING CO.
431 S. Dearborn Street CHICAGO, ILL.

Halliday Elevator Co.

CAIRO, ILLINOIS,

Want Your Consignments

DIRECT BIDS FURNISHED

Our Facilities Good as Any Anywhere
 Better Than Most

CAIRO

CAIRO

COMBINATION

SEND IN YOUR SUBSCRIPTION NOW

PRICE FOR
"AMERICAN MILLER"
"AMERICAN GRAIN TRADE"**\$2.50**

BOARD
OF
TRADE

INDIANAPOLIS

GRAIN
RECEIVERS

The Mutual Grain Company
GRAIN COMMISSION
618 Board of Trade, INDIANAPOLIS, IND.
Careful attention to all shipments

COMMISSION
HAY & MISSION
Grain, Flour and Feed
C. A. SHOTWELL & CO.
Board of Trade, Indianapolis, Ind.

Merchants Hay & Grain Co.
INDIANAPOLIS, IND.
HAY, GRAIN, MILL FEED,
ALFALFA FEEDS
and All Kinds of Live Stock Feeds
Indiana's Largest Feed House

GRAIN
RECEIVERS

OTHER MARKETS

GRAIN
RECEIVERS

DETROIT

CAUGHEY-SWIFT COMPANY
Successors to
Caughey & Carran Co. and McLane, Swift & Co.
GRAIN AND SEED MERCHANTS
We Want Your Detroit
Business
701-5 J. Henry Smith Bldg., Detroit, Mich.

J. L. McCALL, President R. A. DINSMORE, Vice President
S. J. McCALL, Secretary A. M. DINSMORE, Treasurer
The McCull - Dinsmore Co.
COMMISSION MERCHANTS
915-16-17 CHAMBER OF COMMERCE
MINNEAPOLIS, MINN.
DULUTH MILWAUKEE OMAHA

PHILADELPHIA

L. F. MILLER & SONS,
Receivers and Shippers of
GRAIN, FEED, SEEDS, HAY, ETC.
OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA
CONSIGNMENTS SOLICITED. Special attention given to
the handling of CORN AND OATS.
REFERENCES: Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.

BALTIMORE

CHAS. ENGLAND & CO.
RECEIVERS OF
GRAIN and HAY
308-310 Chamber of Commerce
BALTIMORE, MD.

Gould Grain Co.
BARLEY
600 Flour Exchange, MINNEAPOLIS, MINN.

E. E. DELP GRAIN CO.
GRAIN AND FEEDS
453 BOURSE PHILADELPHIA, PA
ELEVATOR, TRANSFER HOUSE AND MILLS:
BOURBON, INDIANA

OMAHA

WE BUY
Wheat, Corn and Oats
Cavers - Sturtevant Company
Successors to CAVERS ELEVATOR CO.
Omaha, Nebraska
Consign to Cavers-Sturtevant

MILWAUKEE

Branch Offices: Racine, La Crosse, Eau Claire, Wis.
E. G. Hadden Company
FUTURES
Wheat—Corn—Oats
Send for our pamphlet explaining Puts and Calls
22 Chamber of Commerce MILWAUKEE

THIRTY-THREE
Years in the Grain
Trade Field is one
Reason why the "American
Grain Trade" is
such a valuable paper
for both advertiser and
subscriber.

LANCASTER
DO YOU REALIZE
That country trade always pays you
best in every way?
We work a large country business.
See the point?
JONAS F. EBY & SON, LANCASTER, PA.

O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas.
Mohr-Holstein Commission Co.
29 Chamber of Commerce
MILWAUKEE
Sample Grain a Specialty
BRANCH OFFICES AT CHICAGO AND MINNEAPOLIS

DULUTH

Randall, Gee & Mitchell Co.
OATS BARLEY CHICKEN FEED
WHEAT SHIPPERS
Write for Samples and Prices
Duluth, Minnesota

There are many other
Reasons some of which
are apparent on the
surface and others which
the publishers will be
glad to explain to you.

Quick Returns
certain from an ad in the Classified
Columns of the "American
Grain Trade"
Rates on Application

LEADING GRAIN RECEIVERS IN ALL MARKETS

ATLANTA, GA.

Gregg, Joseph, & Son, grain and hay brokers.*†

AUGUSTA, GA.

Willet Seed Co., N. L., seeds.

BALTIMORE, MD.

England & Co., Chas., grain and hay receivers.*†

Hax & Co., G. A., grain and hay receivers.*†

BLOOMINGTON, ILL.

Baldwin Grain Co., brokers.

Hasenwinkle Grain Co., grain commission merchants.

O'Neill & Gyles, grain brokers.

Slick & Co., L. E., grain receivers and shippers.

BUFFALO, N. Y.

Alder-Stofer Grain Co., grain commission.*

Buffalo Cereal Co., grain.

Burns Grain Company, grain commission.

Churchill Grain & Seed Co., grain and seeds.*

Harold, A. W., grain merchant.

Townsend-Ward Co., grain commission.*

Urmston Harting Grain Co., grain, commission.*†

CAIRO, ILL.

Halliday Elevator Co., corn, oats.*

Magee Grain Co., grain.*

CHAMPAIGN, ILL.

Sledge, J. P., grain brokers.*

CHICAGO, ILL.

Armour Grain Co., grain buyers.*

Bailey & Co., E. W., commission merchants.*

Baker & Co., F. M., grain and provisions.

Barrell & Co., Finley, grain, stocks, provisions.*

Clement, Curtis & Co., grain merchants.

Cowen Co., W. S., commission merchants.

Delaney, Frank J., grain commission.

Dickinson Co., Albert, seeds.

Dole & Co., J. H., commission merchants.*

Fitch, Walter & Co., commission merchants.*

Freeman & Co., Henry H., hay, straw and grain.*†

Gerstenberg & Co., grain and seeds.*

Griffin & Company, J. P., grain commission.

Hitch & Carder, grain commission.

Hoit & Co., Lowell, commission grain and seeds.

Hooper Grain Co., receivers and shippers.*

Hullbird, Warren & Chandler, commission merchants.

Illinois Seed Co., seed merchants.

Lamson Bros. & Co., commission merchants.*

Logan & Bryan, grain.*

McKenna & Rodgers, commission merchants.*

Nash-Wright Grain Co., grain, provision seeds.*

Albert Miller & Co., hay and produce.*†

Norris & Co., grain merchants.*

Nye & Jenks Grain Co., commission merchants.*

Paynter, H. M., grain and field seeds.*

Pope & Eckhardt Co., grain and seeds.*

Rosenbaum Brothers, receivers and shippers.*†

Rosenbaum Grain Co., J., receivers and shippers.

Sawers Grain Co., grain commission.*

Schiffin & Co., Philip H., commission merchants.*

Shaffer, J. C. & Co., buyers and shippers.*

CHICAGO, ILL.

Somers, Jones & Co., commission merchants.*

Van Ness, Gardiner B., grain commission.*

Vehon & Co., M. L., commission merchants.

Wagner & Co., E. W., receivers and shippers.*

Ware & Leland, grain and seeds.*

Winans & Co., F. E., grain and field seeds.

CINCINNATI, OHIO.

Allen & Munson, grain, hay, flour.*

Fitzgerald Bros. Co., hay and grain commission.*†

Van Leunen & Co., Paul, consignments.*

COLUMBUS, OHIO.

McAlister, Jas. P., & Co., shippers grain and hay.

DECATUR, ILL.

Baldwin & Co., H. I., grain brokers.*

DETROIT, MICH.

Caughey, Swift & Co., grain merchants.*

DULUTH.

Randall, Gee & Mitchell Co., grain and hay commission.*†

EVANSVILLE, IND.

Small & Co., Inc., W. H., field seeds, grain.*†

FORT WAYNE, IND.

Bash & Co., S., grain and seeds.

Niezer & Co., grain, hay, straw, seeds, coal.*†

FOSTORIA, OHIO.

Fostoria Grain Co., receivers and shippers.*

HARRISBURG, PA.

Harrisburg Feed and Grain Co., grain and feed.*†

INDIANAPOLIS, IND.

Boyd, Bert A., grain commission.*

Merchants' Hay & Grain Co., hay and grain.

Mutual Grain Co., grain commission.*

Shotwell & Co., C. A., hay, grain, feed, flour.*†

Witt, Frank A., grain commission and brokerage.

Urmston Harting Grain Co.*†

KANSAS CITY, MO.

J. A. Brubaker & Co., hay merchants.*†

Carlisle Commission Co., wholesale hay and grain.*†

Dyer & Co., hay.

Huffine & Co., hay merchants.*†

Moore-Lawless Grain Co., grain receivers.*

Moore-Seaver Grain Co., corn and oats specialties.*

Shofstall Hay & Grain Co., hay, grain.*†

Solomon Valley Milling Co., hay, grain and mill products.

LANCASTER, PA.

Eby & Son, Jonas F., receivers and shippers.*†

LOUISVILLE, KY.

Callahan & Sons, receivers and shippers.*

Thomson & Co., W. A., receivers and shippers.

MANSFIELD, OHIO.

Goemann Grain Co., grain merchants.*†

MILWAUKEE, WIS.

Armstrong, W. J. Co., hay merchants.*†

Bartlett & Son Co., L., grain commission.*

Courteen Seed Co., seeds.

Donahue-Stratton Co., buyers and shippers.*

Hadden, E. G. Co., grain commission.*

Mohr-Holstein Commission Co., grain commission.

Rialto Elevator Co., grain receivers and shippers.

MINNEAPOLIS, MINN.

Gould Grain Co., grain merchants.

McCaull-Dinsmore Co., commission merchants.*

Quinn, Shepherdson Co., grain commission.*

NEW CASTLE, PA.

Hamilton, C. T., hay, straw, grain, millfeed, produce.*†

NEW YORK, N. Y.

Brooklyn Hay & Grain Co., hay, straw and grain.*†

Forbell & Co., L. W., commission merchants.*†

Keusch & Schwartz Co., grain commission.*

NORFOLK, VA.

Cofer & Co., Inc., J. H. grain.*

Cofer, Vernon L., hay, grain, feed.*†

LeGrand & Burton, grain and hay brokers.*†

OMAHA, NEB.

Cavers-Sturtevant Co., receivers and shippers.*

PEORIA, ILL.

Bowman & Co., Geo. L., grain commission.

Buckley, Pursley & Co., commission merchants.*

Dewey & Sons, W. W., grain commission.

Feltman, C. H., grain commission.*†

Grier & Co., T. A., grain commission.*

Miles, P. B. & C. C., grain commission.*†

Mueller Grain Co., receivers and shippers.*†

Rumsey, Moore & Co., grain commission.*

Tyng, Hall & Co., grain commission.*

PHILADELPHIA, PA.

Delp Grain Co., E. E., grain and feeds.*†

Miller & Sons, L. F., receivers and shippers.*†

Richardson Bros., grain, flour, mill feeds.*

PITTSBURGH, PA.

Heck & Co., W. F., receivers and shippers.*†

McCague, R. S., grain and hay.*†

Smith & Co., J. W., grain, hay, feed.*

Stewart & Geidel, D. G., grain, hay and feed.

RICHMOND, VA.

Beveridge & Co., S. T., grain, hay, feed, seeds.*†

Richardson, Jr., Co., Inc., W. F., grain and feeds.*

SALT LAKE CITY, UTAH.

Smurthwaite Grain & Milling Co., C. A., grain, flour, hay, seeds.

ST. LOUIS, MO.

Goffe & Carkener Co., receivers, grain, hay seeds.*†

Green Commission Co., W. L., receivers, shippers, exporters.*

Langenberg Bros. & Co., receivers and shippers.*

Mullally Commission Co., Martin, commission merchants.*†

Nanson Commission Co., receivers and shippers.*

Picker & Beardsley Com. Co., grain, hay and seeds.*†

Prunty, Chas. E., grain and seeds.

Toberman, Mackey & Co., grain, hay and seeds.*†

THE AMERICAN ELEVATOR AND GRAIN TRADE

August 15, 1914.

Ask About the Things You Cannot See

Look at the picture. It shows as well as a picture can what the **Wolf Jumbo Two Pair High Feed Grinding Mill** is like on the outside.

But there are other things, the parts that are hidden from view, that are of just as great importance to the prospective feed mill purchaser as the outer appearance of the machine.

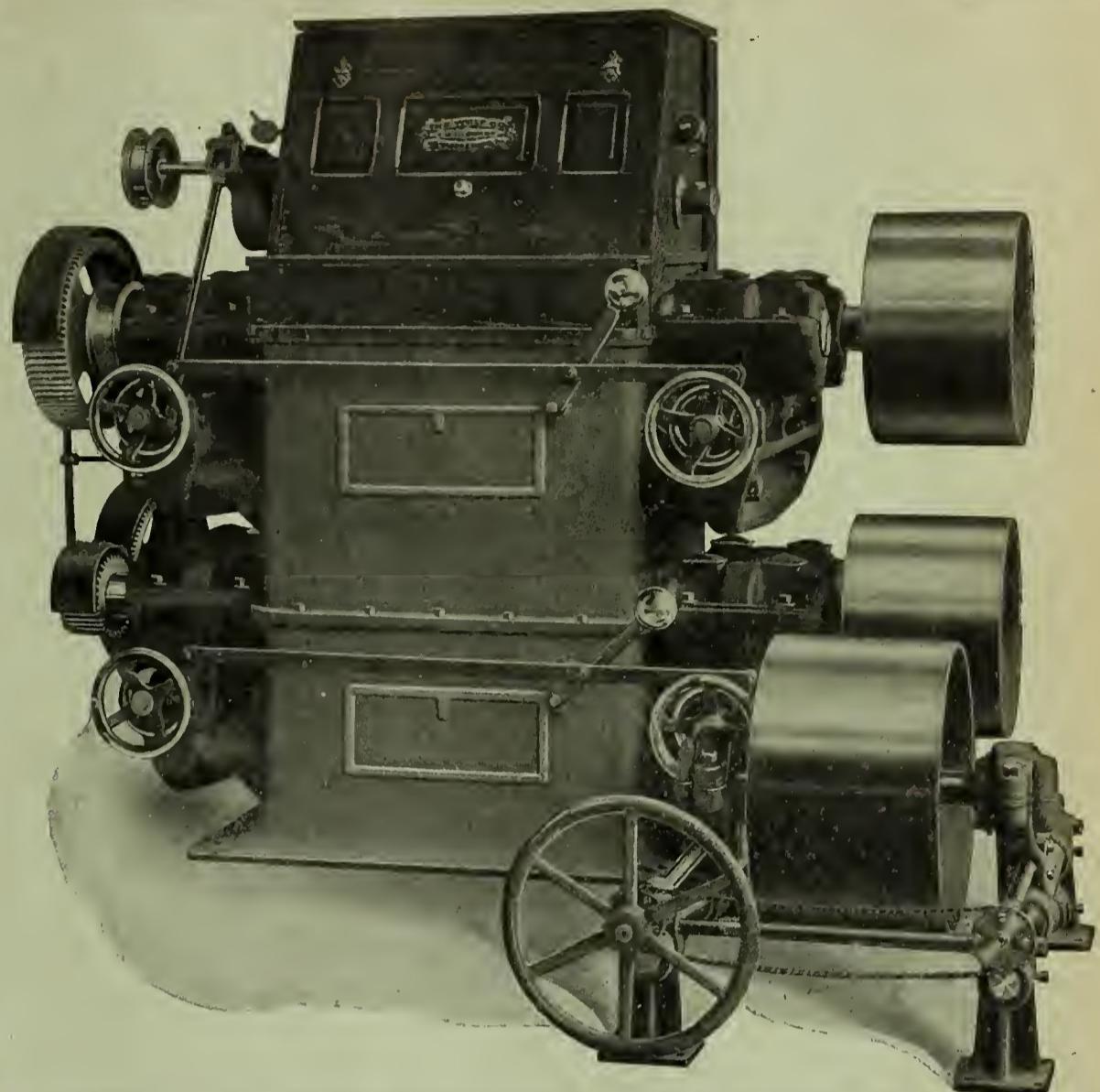
There are the bearings. You don't know what the bearings on this machine are like or why they minimize the friction list. *But they do!*

There is the feeder mechanism. You have a hazy idea that it is probably somewhat different from other feeders. And it is *considerably!*

There are the grinding adjustments. You can't tell from the picture why they are such positive safeguards to the rolls. *But they are!*

It is about these important features that you want to know—and we want to tell you.

If you write that letter NOW it will only be two or three days 'till you know as much about this machine as we do. We have nothing to hold back.



THE WOLF COMPANY
CHAMBERSBURG, PA.

Needed By Elevator Operators

¶ Elevator owners, large and small, who desire to operate their houses to the best advantage need the

BOOK of WRINKLES

THIS is a collection, in book form, of a large number of handy and labor-saving devices contributed by readers of the "American Miller." A considerable proportion can be adopted to advantage in elevators and will save time and money. The wrinkles include improvements in spouts, elevators, belts and cleaners. Every idea is original and has been put into practical use.

A 136-Page Book, Fully Illustrated
Price \$1.00

Mitchell Bros. Publishing Co.
431 S. Dearborn Street, Chicago, Illinois

THE MILL OF GREATEST
ECONOMY AND EFFICIENCY
THE "MONARCH"
BALL BEARING ATTRITION MILL
SUPPLIED FOR DIRECT ELECTRIC MOTOR OR BELT DRIVES

Most economical in operation because it requires 25% to 50% less power than a Babbitt or Brass Bearing Mill. It is lubricated by means of compression Grease Cups, eliminating the use of Oil, and thus cutting down the cost of operation and raising the standard of cleanliness.

Most economical not only on account of the Saving in power, but also in maintenance, because the Up-Keep expense is practically nothing. All parts interchangeable. Cannot get out of trim and is so Simple in construction that anyone can make the Repairs. You never lose time or run up big Repair Bills with a "MONARCH." Produces a better quality and larger quantity of work at less cost.

You don't have to take any man's word about the "MONARCH." Satisfy yourself under our unqualified guarantee before you buy.

SPROUT, WALDRON & CO.

THE MILL BUILDERS
P. O. BOX 320

MUNCY, PENN'A

Ask us for details on the
"Monarch" Ear Corn and Cob Crusher

SPROUT,
WALDRON
& CO.,
Box 320
MUNCY, PA.

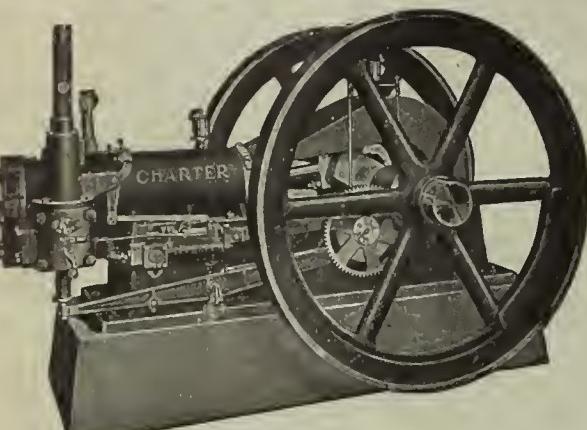


"MONARCH" Ball Bearing Direct Connected Motor Driven Attrition Mill
WESTERN OFFICE Sales Dept. 100 CHICAGO
No. 9 South Clinton Street. Phone Franklin 3949
We Manufacture the largest, most improved and most complete line
of machinery and supplies for Flour and Feed Mills,
Grain Elevators, etc., in the world.

Please send me detailed information on your wonderful "Monarch" Ball Bearing Attrition Mill.
Name.....
Town.....
State.....

WE GUARANTEE { SERVICE SATISFACTION ECONOMICAL POWER POWER AT ALL TIMES EASY STARTING
with
CHARTER TYPE "R" OIL ENGINES

OPERATE ON KEROSENE DISTILLATE FUEL OIL GASOLINE ALCOHOL GAS NAPHTHA



A RECORD OF THIRTY YEARS' EXPERIENCE IN THE ENGINE BUSINESS

EXPERIENCE BEGETS KNOWLEDGE

You get the benefit of thirty years of it when you buy CHARTER Engines

400 Locust Street

CHARTER GAS ENGINE CO. (Incorporated 1871)

STERLING, ILL., U.S.A.

"SALEM"-MADE ELEVATOR BUCKETS



THE W. J. CLARK PLATE & SHEET METAL WORK SALEM, OHIO. U.S.A.
Please mention this paper.

Have the originator's address stamped in a circle on the front of each one like this. Specify "Salem"-Made; Sold by All Dealers. If you need an unusual size gauge or shape, that the dealer can't furnish, send your order direct to our works; we have dies, etc., to make up anything in this line.

The W. J. Clark Company, - Salem, Ohio

WELL ER-MADE

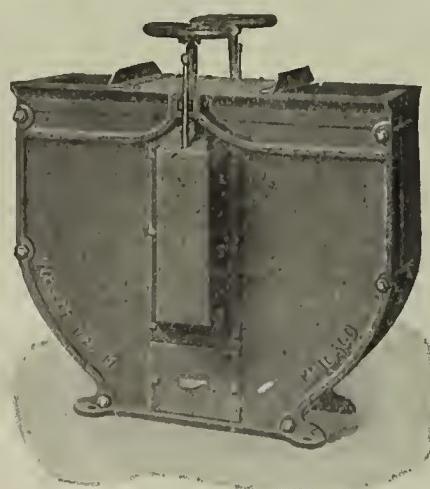
The Correct Equipment for Handling Materials and Transmitting Power



Weller Cold Rolled Screw Conveyor

has wearing qualities that cannot possibly be obtained by any other process of manufacture.

Elevator
Boots
Heads
and
Legs

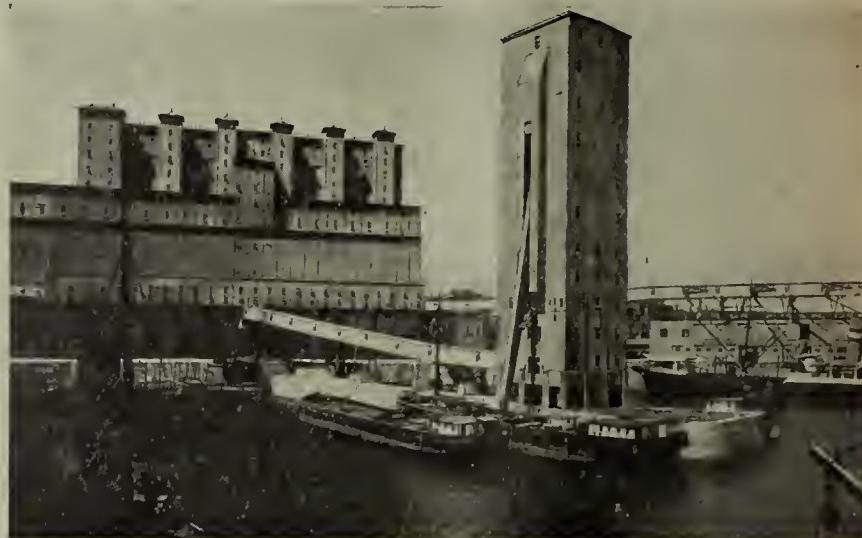


Steel
Wood
Standard
or
Special

We specialize on machinery for
MILLS and ELEVATORS

Weller Mfg. Co., Chicago
NEW YORK, 50 Church St. ST. LOUIS, 520 Victoria Bldg. DALLAS, 711 Main St.

A LOT HAS BEEN SAID



About this big Harbor Commissioners' Elevator at Montreal.

All we have to say about it here and now is to point to the fact that Webster Machinery entered largely into its equipment.

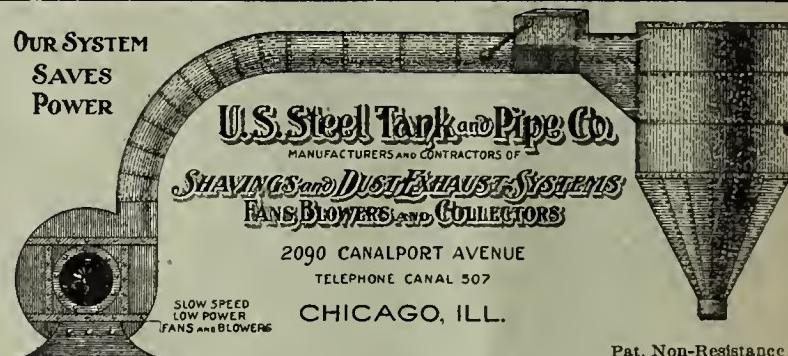
The two Webster Marine Legs in the tower on the pier are 125 feet long. Other details big in proportion.

The Webster M'f'g Company
Tiffin, Ohio

CHICAGO:
McCormick Bldg.

NEW YORK:
90 West Street

(61)



PNEUMATIC Conveying Systems Designed and Constructed. Pipe work a specialty.

Anything in Sheet Metal up to and including 10-gauge, either Black or Galvanized.

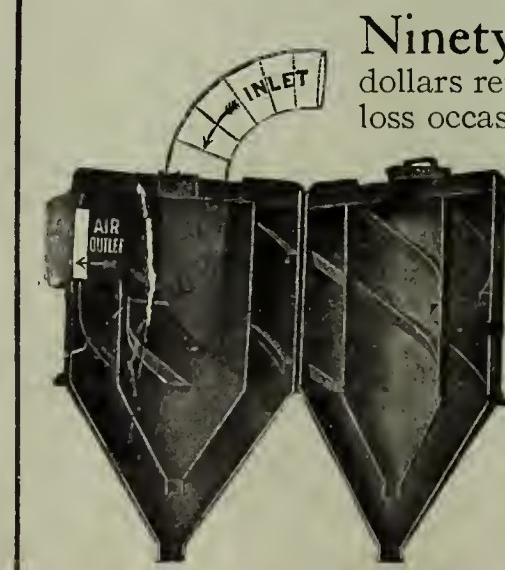
Send us your Plans and Specifications, and we will gladly furnish estimates on your requirements.

Our estimators are at your service.

REMEMBER, WE DO WORK RIGHT.

Ninety - three thousand dollars represents the latest reported loss occasioned by loss of life and injury to employees, exclusive of the immense property loss, in dust explosion in an elevator.

To avoid a repetition of such catastrophes, install a **DAY** dust collecting system. Send for latest catalogue.



THE DAY COMPANY
MINNEAPOLIS, MINN.